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## Vacation Lectures
ON
## FIBRINOUS DEPOSITION IN THE HEART:

ITS HISTORY AND PRACTICAL MEANING.

DELIVERED AT THE GROSVENOR PLACE SCHOOL OF MEDICINE.


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### LECTURE II.

*Conditions of Disease in which Deposition of Fibrine occurs in the Heart: Symptoms and Diagnosis of Concretion.*

GENTLEMEN,—From points connected with the structure of fibrinous deposits, and the proofs that these deposits are in many instances laid down prior to death, we pass naturally to consider those conditions of the system which are favourable to deposit—in other words, the diseases in the course of which deposits are formed. To understand clearly the question here involved, we must consider the modifications to which the fibrine of the blood is subjected under various diseased states, and especially those modifications leading to deposit.

1. In various conditions the fibrine is, or seems to be, diminished in the blood. These conditions are indicated in diseases in which the hæmorrhagic tendency prevails. True typhus, and yellow fever, are diseases of this nature. The effects of many poisons, as the cobra poison, the vegeto-alkaloids, the alkalies, and several organic acids, are manifested in this apparent deficiency of fibrine. In these cases, the blood, as Plato would express it, "is no longer under the natural guardianship of its fibres"; so it exudes into the soft structures, giving rise to petechial spot, black vomit, melæna, hæmaturia, and, in fact, to any form of hæmorrhagic discharge, according to the degree of pathological change.

I have said that, in these cases, the blood seems to be deficient in fibrine. I say *seems* to be deficient, because I wish to guard myself from saying absolutely that the blood is so deficient; and I would impress this qualification earnestly, because, from some late inquiries on the effects of alkalies and alkaloids on blood containing, when drawn, the normal amount of fibrine, the same apparent decrease of fibrine has been produced by the mere addition of these agents in excess to the blood. We need not, therefore, bind ourselves to the idea that, in diseases attended with great fluidity of blood, less fibrine is really produced in the system; we may rather infer that, as all evidence tends to prove, there are conditions in which the blood is surcharged with a body having the power of holding fibrine in solution—of reducing the fibrine, in fact, into a form of albumen. In such condition of blood, whether my explanation of its cause be correct or not, this that I am about to say shall be correct: the blood, while in the condition named, never, either before or after death, yields a fibrinous separation. Ordinarily, it does not coagulate even as red clot, but at most it becomes a thick treacly mass, like newly drawn blood treated with an alkali and afterwards mixed with albumen.

2. There is a second variety of blood, not widely removed from the above named kind, in which there is nevertheless a peculiar tendency to separation of fibrine; and this without any necessary increase of the fibrine itself, or the presence of those systemic states in which the combustion of the body is increased. The older writers were accustomed to notice this separation of fibrine in scurvy. They spoke of the stream of blood in that disease as having two colours, a purple and a white; and of a loose buffy coat forming on such blood. I am convinced to proof that the condition here expressed exists—exists sometimes, as it would seem, by hereditary predisposition; at other times, by acquired disease, especially by disease derived from peculiarities of food. I do not pretend to be master of all the facts connected with this subject, but I will narrate such few as I know. I once attended a child covered from head to foot with purpuric spots—a miserable puny child, cold always, and emaciated. This child died suddenly; and I traced the cause of the sudden death clearly enough to a large concretion of fibrine which had been laid down in the right auricle. I also knew an instance of extreme anæmia terminate in a similar way; the only difference being, that the concretion had formed in the pulmonary artery, and not in the auricle. In a case of purpura at this very time under my observation, there is every disposition to effusion of blood under the skin, and large purpuric blotches are produced from the slightest cause; but, some time after this effusion has occurred, there is a hardening of the matter at the effused point; and it is observable that the blood of this patient, although it is so easily effused, is not incapable of coagulation when it escapes from the body.

3. There is another condition, in which the fibrine of the blood undergoes relative increase. It may be difficult at first to understand what is meant by relative increase. I mean by it, then, simply a state in which the fibrine is not abnormally increased, nor the system under any condition for the production of an increase of fibrine, but in which, the fibrine remaining normal, the watery constituent of the blood is below the usual standard. This condition is not uncommon; for, water being the grand menstruum in which the fibrine is held in solution, any reduction of it in amount will favour materially the tendency to deposit. It may seem, at first sight, that this statement runs counter to that which was made above relative to anæmia; but there is no contradiction. Let me explain. Water is, as I have said, the menstruum in which the fibrine is held in solution. But fibrine will not remain in solution in water simply; the water must be the menstruum also for an agent having the power of dissolving the fibrinous constituent. This agent, as we now have proof beyond every kind of dispute except sheer cavil, is an alkali of the volatile series. Now, in order that fibrine should remain in solution, there must be a fixed relationship existing between the menstruum, the solvent, and the substance dissolved. If the substance dissolved is but dissolved, and no more, as fibrine is in blood, precipitation of fibrine can be induced by addition of more water, because, in this addition, we distribute the solvent over a larger surface; we weaken, that is to say, the solvent power of the solution; and the result necessarily is, that the dissolved substance is proportionately precipitated. On the other hand, if from a solution of fibrine, as in blood, we draw off by osmotic action the watery part, together with the solvent, the fibrine is necessarily increased in relation to the portion of water and solvent left behind. In both cases alike, there is, therefore, a tendency to the deposition of fibrine. Out of the body, I can produce in experiment all these phases; and in the bodies of the dead we constantly meet with the results of these changes, if we are observant observers.

The best marked cases in which the fibrine is found separated after death, as the result of loss of fluid from the system, are those where, during life, there has been an exhausting and rapid flux from the alimentary canal. In cases of cholera, the fibrinous deposit so commonly found after death is formed in this way; and the same may occur in other disorders affecting the alimentary system. I have seen them, as so produced, in death from mesenteric disease; and once in a debilitated person, after a fatal purging, induced primarily by self-dosing and overdosing with black draught. Deposition, brought about by loss of fluid, will further happen from rapid elimination through other channels than the bowels, as from the skin in the colliquative sweating of phthisis.

Once more; the fibrine may be relatively increased, not

in proportion to the water, and not in proportion to the mass of blood, but in proportion to its own solvent. The old writers were accustomed to state that concretions were the result of what was called languor of the circulation. We cannot adhere to that phraseology at this time of science, because the phraseology is imperfect; but we may, nevertheless, accept that these writers did truly express a partial explanation of a very interesting fact. In many cases of great prostration of the body and of the powers of the circulation, where, notwithstanding, life is slowly destroyed, the blood making languid way for many hours—in such cases (and I may add, in the majority of such cases), the fibrine is left deposited in the heart. The cases themselves include: (*a*) deaths from shock, where the life is not extinguished at once, but in which the act of death has been very considerably prolonged, say for a period of from three to four days; here the fibrine may be separated in a firm and decided mould; (*b*) deaths from the prolonged effect of some poisons, which depress the heart without adding any solvent substance to the blood, such as opium; and (*c*) those instances of disease where death is preceded by great degenerative change, and by slow and certain exhaustion. I have met with *ante mortem* concretions in examples of this nature, after death from mere senile decay, fatty degeneration of the heart, and slow alcoholic poisoning. The concretion, however, in these cases, is often but indifferently developed. It is gelatinous in character, very heavy at first from the presence of water, but containing in reality a very small amount of fibrine. Dr. Gould, whom I have noticed once before, laid great stress on debility as a cause of deposition. He opined —and the opinion has been reiterated by Dr. Meigs of Philadelphia—that, owing to the stasis produced in the blood during a fit of syncope, the commencement of a fibrinous deposition may be traceable, in some instances, to an attack of syncope. Nor is it to be denied that many arguments lend a colour to this view of stasis as a cause of concretion. The observation made by Lancisi respecting the mode in which fibrine is deposited in aneurism, the first point of deposit in the sac of an aneurism being that at which the stasis is most marked, was alone of sufficient importance to establish the stasis hypothesis for a long period; and the more so, because this hypothesis is not opposed to the truth, but is only faulty in that it does not express the whole truth. The position of the question is as follows:—When blood yet fluid is placed entirely at rest in a closed cavity, and under a pressure equal to that of the circulation, there is no separation of fibrine. On the contrary, blood so enclosed is in the best condition for its fibrine to remain in solution. Here is an argument, then, in direct opposition to the pure stasis view; flatly disproving it, indeed, as a bare hypothesis. Blood, therefore, from which *ante mortem* concretion is formed in the asthenic, is not blood in a state of absolute rest. No; it is blood undergoing slow and languid motion, in process of which the volatile solvent of the fibrine, a product of an active nutrition, is in the first place imperfectly supplied, and, secondly, is eliminated in the expirations of the skin and lungs, to the loss of the blood. The relationship existing between the fibrine and its solvent being thus destroyed, the fibrine is precipitated, and is found in the separated condition after almost all forms of death from asthenia, excepting those where a solvent poison is present as part of the disorder.

4. The last condition favourable—most favourable—to fibrinous separation, is that in which the blood undergoes an absolute increase of fibrine—that condition which the old men were content to designate as disease "attended with sizy blood", and which we moderns, following Franz Simon, call "hyperinosis" or superfibrination. We include under this head a large group of diseases marked by inflammatory symptoms, and always running an acute course; pneumonia; croup; diphtheria; acute rheumatism; erysipelas; inflammatory diseases of all the serous and mucous tracts; the inflammatory reactive fever succeeding on surgical operations; inflammatory lesion in the uterus and peritoneum after parturition; and cerebral congestive excitement.

In thus naming certain local symptoms indicating what we are pleased too often to consider as pure diseases, I write to make the subject intelligible. In my opinion, these local changes are all secondary to one grand systemic derangement, a primary and essential feature of which is increase of fibrine—hyperinosis.

Still farther, I maintain that there are cases in which the hyperinosis is not only preexistent to any local manifestation of disease, but in which it is so marked, and the deposition of fibrine in the heart as a consequence of the increase is so rapid, that death takes place from the obstruction, before any local change is developed. Instances of this nature, while they are not by any means numerous, are, as a general rule, overlooked. There are, nevertheless, to be found in our literature certain extraordinary examples of this nature, worthy certainly of notice. One of the very best observers of disease in the last century, Dr. Huxham, in a letter written by him to Dr. Mortimer, describes what was sometimes called an epidemic of cardiac polypi. In this letter, it is narrated that several seamen, brought during cold weather into England from the West Indies, were seized with short coughs without expectoration, continual and violent palpitations of the heart, intermitting trembling pulses, anxiety, and pain and sinking at the heart, so that they could not lie down; they had heavy dead countenances, some pains in the side, but very little fever. Twenty men thus soon died. Two of these men were opened, and in their hearts were found monstrous polypi, tough and adherent to the walls of the ventricle. One of these weighed an ounce. They were on both sides the heart; the largest on the right side.

A still more remarkable illustration of a similar epidemic is described in the *Edinburgh Annals of Medicine* for the year 1800, by another equally good observer, Dr. Chisholm. I have often noticed this valuable paper, but now I will give it almost entire. It is entitled "A Short Account of the Epidemic Polypus in Granada in 1790." The sufferers were negroes, who were subject to peculiar local influences at the time of the seizure. These influences Dr. Chisholm first describes. The foreground was the open sea, with an extensive and bracing beach of sand. On the left was a hill of considerable size and ascent, the base sides of which, with the reflecting surface of the sea, produced in dry seasons an immense degree of heat. The background was a marsh, extending from the sea to the mountains. From this marsh deleterious vapours were exhaled. Immediately behind the marsh, a ravine began, through which rushed a current of wind of great coolness. The negro houses of the plantation were built on the hill on the left, chiefly on its slope and towards the edge of the marsh. The negroes were, therefore, at once exposed to excessive heat, a cold chilling current of air, and the miasma of the marsh. Their diet was chiefly vegetable food. They had been employed, immediately before the appearance of the disease, in clearing the surface of the marsh, and in holing land for the reception of cane-plants. They were much given to the destructive habit of eating a species of pipeclay very abundant in Granada.

The disease commenced in the end of September, was most prevalent in the latter part of October, and went off in November. The whole number of the sick was about forty, of whom seven died.

The symptoms were, pain at the pit of the stomach and head, and difficult respiration, attended with dry skin, small quick pulse, and slight dry frequent cough. No febrile heat accompanied these symptoms. The surface, on the contrary, was remarkably cool; but there was a heaviness and dulness of the eye, anxious features, and depressed spirits. This state continued for three days; then the pulse became quick, from 120 to 140, and intermitted, attended with a penetrating pungent heat, which produced a pricking sensation on the hand of the person feeling the pulse.

The disease now became somewhat intermittent, the intermission lasting eight or nine hours. During the paroxysm, the struggle for breath, the aggravation of all the other symptoms, and *the very quick*, interrupted, and evidently visible, as well as audible palpitation of the heart, produced a scene of uncommon horror. The paroxysm was succeeded by a cold clammy sweat, and a state of approaching syncope. The second paroxysm generally put a period to the existence of the patient. The disease was also distinguished, during the latter stage, by an almost constant, disagreeable clammy sweat, overspreading the face, the upper extremities, and the body as low down as the scrobiculus cordis, all below remaining parched in a most remarkable degree. The disease seemed sometimes inclined to terminate by a metastasis. One instance of this was remarkable, wherein a patient, after labouring under all the symptoms peculiar to the disease before the intermittent period, found himself all at once, and without an evident cause, relieved of them; but he perceived at the same instant an excruciating pain a little above the elbow, and nearly about the middle of the thigh. He continued ever afterwards quite free of all the symptoms of the polypus; but they were succeeded by a large abscess in the parts in which he felt the pain. That in the arm disappeared gradually; but the other became so large as to occupy the whole of the under part of the thigh. The cure was effected by passing a seton through the whole length of the tumour; by the use of two dozen of

Madeira wine, bark, and a calomel pill with opium, three times a day.

The audibleness of the palpitation of the heart in these cases, Dr. Chisholm remarks, may be considered an exaggeration; but in one instance, particularly, a gentleman (Mr. McSween), to whom the negroes belonged, heard distinctly the palpitation from an adjoining room.

Dr. Chisholm states that, at the onset of the epidemic, he knew not how to act until dissection showed him; and adds, that having no suspicion of the heart being the seat of the malady, he did not examine that organ in the first two bodies opened; but finding the brain and all other organs in a state of health, he opened the heart in the third body, and discovered what he considered might be the cause and seat of the disease. In the right ventricle of the heart he found an enormous polypus, which extended considerably into the pulmonary artery. On extracting it, the body which was contained in the ventricle, measured two inches in breadth. In the fourth body there was a large polypus in the right and left ventricle, besides one in the right auricle. The hearts of the fifth, six, and seventh were just similar; and in these five, except one, where the lungs were diseased, no other morbid appearance could be found.

It is interesting to remark, as an aid to our therapeutics, that Dr. Chisholm, after he had discovered what he considered to be the cause of death, viz., the concretions in the heart, changed his plan of treatment. On the very first appearance of symptoms, he took blood, and then freely salivated, with mercury. The results, he adds, were most happy; not one that was salivated died.

I can offer, on my own part, no such a narrative as that given by Dr. Chisholm; but I can very definitely refer to not fewer than six well marked cases in which death, taking place rapidly, with no other foreboding symptoms than a rigor and succeeding slight febrile heat, was traceable by the *post mortem* inquiry to deposit of fibrine in the right side of the heart; the deposit filling the auricle, to the exclusion of blood, and extending, in the course of the circulation, from the auricle into the ventricle and pulmonary artery.

In other instances, as we have seen, the deposit of fibrine is subsequent to the development of one or other of those forms of local mischief to which we assign a specific name. The obvious features of such cases are distinguished by the presence of the local change, but the essential characters are the same in all examples, that is to say, the fibrine is abnormally increased. The increase may extend from the normal two and a half or three parts per thousand, to six, nine, or it has been said to twelve parts per thousand. This latter figure is possibly derived from an error in analysis, but the fact of a great increase is without a shadow of doubt; the result of the increase is also often equally striking. The excess of fibrine, beyond a limited extent, cannot remain in suspension in the blood, and the heart, under such conditions—if so plain but expressive a term be allowed me—*churns* out the fibrine, and becomes the receptacle of the separated mass.

I can give, at this moment, no explanation of the first cause of increase of fibrine in the cases I have named, except by entering upon the whole question of hypercausis and its origin; which task I would rather avoid, or at least retain. It will be more instructive, at this time, to pass to the subject of the symptoms of concretion, concerning which all is demonstrative.

[*To be continued.*]

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Children's Hospital in Edinburgh. A house (No. 7, Lauriston Lane, Edinburgh), has been fitted as a Children's Hospital, and was to be opened on February 1. The objects of the institution are:—1. To provide for the reception, maintenance, and medical treatment of the children of the poor during sickness, and to furnish with advice and medicine those who cannot be admitted into the hospital. 2. To promote the advancement of medical science with reference to the diseases of childhood, and especially to provide for the more efficient instruction of students in this department of knowledge. 3. To diffuse among all classes of the community, and chiefly among the poor, a better acquaintance with the management of infants and children during health or sickness, and to assist in the education and training of women in the special duties of children's nurses. *Consult. Phys.*—Prof. Christison, Dr. C. Wilson. *Consult. Surg.*—Prof. Miller. *Ordinary Phys.*—Dr. G. Weir, Dr. P. Newbigging, Dr. J. M. Duncan. *Resident Med. Officer*—Mr. W. B. Robertson. *Med. Com.*—Drs. A. Peddie, Smith, Struthers, and H. D. Littlejohn.

# Illustrations of HOSPITAL PRACTICE:

## METROPOLITAN AND PROVINCIAL.

## DORSET COUNTY HOSPITAL.

### CASES OF NEURALGIA, ETC., SUCCESSFULLY TREATED BY NARCOTIC INJECTION.

Under the care of Charles Cowdell, M.D., Physician to the Hospital.

[*Cases reported by* D. W. Phillips, Esq., *House-Surgeon.*]

At the anniversary meeting of the British Medical Association, held at Edinburgh in July 1858, a lecture was delivered by Dr. Alexander Wood on the method of treating neuralgia by narcotic injection, the narcotic chiefly recommended by him being a solution of morphine. This method had yielded many successful results.

It has since been tried in some of our British hospitals (see report of cases in St. George's Hospital, British Medical Journal, January 8, 1859), and more thoroughly, perhaps, in the Parisian hospitals. In these last, the sulphate of atropine appears to have afforded the greatest relief.

In the following cases, a solution of morphine was tried in one with promise of a good result; but the patient would not permit a continuance of the treatment. In the other three, a solution of atropine (two grains to the ounce) was the narcotic employed, being slowly injected by means of the small nævus-syringe, now in common use, which has a screw piston, whereby the quantity can be both measured and injected *guttatim*. A similar instrument was employed by M. Hérard, of the Lariboisière Hospital, in Paris (*Journal de Médecine et de Chirurgie*, etc., 1859; art. 5080, p. 337, and art. 5694, p. 392). It is delineated in the journal referred to (p. 394).

Case I. Susan Ellis, aged 20, domestic servant, was admitted into hospital September 29, 1859, with the following statement:—"She had an attack of acute rheumatism five months ago, with delirium at intervals during three weeks; and on recovery she was seized (sixteen weeks ago) with an acute pain in the left hip. The hip has been repeatedly leeched and blistered without benefit." She cannot stand or sit. She is extremely anæmic, and in the region of the sciatic nerve, experiences violent pain, which is much aggravated by pressure. There is no hip-disease; the contour is normal; the muscles of the thigh and leg are very flabby; the ham-strings are contracted and tense; the knee is bent, and the foot drawn up. She has, during the whole time, been unable to walk without crutches. She was ordered meat diet, cod-liver oil, and a mixture of iodide of potassium.

Sep. 30th. She passed last night, as usual, without sleep, and tortured with pain. Half a drachm of the solution of atropine (two grains to the ounce) was ordered to be injected into the track of the nerve to-night

Oct. 1st. She slept well all night. She says she has not had so good a night for sixteen weeks. She felt drowsy immediately after the injection.

Oct. 5th. The injection was employed last night. She slept well, and this morning she is quite free from pain.

Oct. 6th. There is still no pain. She was ordered ammonio-citrate of iron for the anæmia. The iodide of potassium was omitted.

She was treated for anæmia from this date to November 10th, when the report runs thus:—

She has had no pain in the hip since the last injection on October 4th. Two injections only were employed, at an interval of three days, the first of which gave immediate relief; the second removed pain, soreness, and contraction altogether. She can walk with ease, experiences no pain on pressure over the nerve, and has gained flesh rapidly. She was discharged well.

Case II. Henry Parsons, aged 25, plasterer, was admitted with chronic rheumatism December 1st, 1859. He had for ten days before admission had so much pain in his loins, that he was quite unable to turn in bed. He had been unable to work for six or seven weeks. He was treated with guaiacum and Dover's powder, and an iodide of potassium mixture, until January 12th, 1860, when, as he complained of additional pain in the lumbar region, the atropine injection was ordered.

Jan 13th. He complains of pain in the stomach and bowels, thinks it is the medicine; the pain in the back was greatly relieved by last night's injection. He was ordered the syrup of iodide of iron two drachms three times a day.

Jan. 15th. The patient is much better. He has no pain in the back, but feels soreness in muscles of thigh. The injection was repeated.

Jan. 17th. The pain and soreness are relieved, but not quite gone. The injection was repeated.

Jan. 23rd. The patient is much better; he feels that the rheumatism is entirely gone. He has had three injections, at intervals of two days. He says he is cured thereby.

Jan. 26th. He feels able to work, and has no pain whatever. He was discharged well.

Case iii. Elizabeth Dine, aged 50, nurse, was admitted January 9th, 1860, with acute sciatica.

Last night (January 8th) she was suddenly seized with an acute pain in the back, at the sacro-iliac symphysis, which shoots down the left leg as far as the great-toe. She cannot walk or even stand, nor lie on her back or left side. The pain is much increased on pressure behind the trochanter-major and in the popliteal region. Dry cupping was ordered to be applied in the region of the nerve; and the atropine injection at night.

Jan. 11th. She found much benefit from the injection. She slept well; can move her leg: there is still much pain experienced on pressure. The injection was repeated.

Jan. 14th. The injection was again used last night, and this morning the report is:—The pain is entirely gone; there is no pain, even on pressure, however firm. She can walk, stand, or sit.

Jan. 19th. She has improved her walking the last five days; is now quite well, and was discharged well.

Remarks. It is comparatively rare that a recent case, like the last, is admitted into an hospital, and therefore it is worth notice that the injection was employed within twenty-four hours of the attack, and that neither general nor local abstraction of blood was resorted to, nor counterirritation in the second stage; but the injection of atropine only three times, at intervals of two days, the effect of which, on the disease, is very evident. In the above cases, no pains were taken to discover the particular spot where most tenderness was felt, and but little constitutional inconvenience was caused; some giddiness, succeeded by dryness of throat and dilatation of the pupil, however, occurred. The rapidity with which relief was afforded took us quite by surprise, while its permanence has given equal satisfaction to medical attendants and patients. The only other case in which the atropine injection has been prescribed by Dr. Cowdell, is one of intercostal neuralgia, treated while this paper has been in the hands of the printer. The young woman, aged 18, has been for several weeks under treatment for that troublesome pain in the left side—the cause of so much discomfort to many young women. She has at present had only one injection, and from it derived very great relief.

Case iv. Anna Dare, aged 35, washerwoman, was admitted September 23, 1859, with facial neuralgia and cervical myalgia, which had continued more or less for three years, the pain coursing from the left temporal region to the clavicle and scapula, affecting the integument and muscles of the neck, especially the trapezius muscle. She has been blistered and cinchonised for eighteen months, without benefit. She was ordered an injection of a quarter of a grain of morphia into the tissues of the neck, night and morning.

Sep. 24th. The patient passed a good night—the first good night for many months. The effect of the injection was sleep in less than ten minutes.

Sep. 26th. The patient is improved. The pain in the face is less; being nervous, she complains of general pain, especially in the morning. She was ordered a shower-bath.

Sep. 27th. She will not submit to the shower-baths, or further injections. She was discharged accordingly, relieved.

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Adulteration of Food. A Bill of Mr. Scholefield, Mr. Wise, and Mr. Villiers, imposes a penalty on persons guilty of adulterating articles of food or drink. Vestries and district boards in London, and town councils in boroughs, will appoint analysts; and for the fee of 2*s.* 6*d.* to 10*s.* 6*d.* purchasers of suspected articles may have them analysed, the certificate of the analyst being legal evidence. There will be an appeal from convictions before the justices (who will have power to order analyses of food) to the Quarter Sessions. The Act is limited to England.

# Original Communications.

## THE SANGUINARIA CANADENSIS: ITS NATURAL HISTORY, PROPERTIES, AND MEDICAL USES.

By George D. Gibb, M.D., M.A., M.R.C.P, Physician to the St. Pancras Royal Dispensary.

[*Read before the Medical Society of London, January 23rd*, 1860.]

[*Concluded from p.* 90.]

***Medicinal Uses.*** The sanguinaria holds a very high rank at the present time in American medicine, and takes its proper position, among many other valuable remedies but little known in this country, in the *United States Dispensatory* and other standard works on therapeutics and pharmacology. It has been considered with, I think, great justice to be allied in its properties to the polygala senega or snake-root, and promises in many instances to be a valuable substitute, both in relation to its emetic and its expectorant properties, in various throat and chest affections. Many American writers consider that there are very few plants superior to the present in its medicinal virtues; and the concurrent testimony of a number of eminent men shows, in their united experience, that it is worthy of a trial in this country in many diseases which perhaps may sometimes prove rebellious to the ordinary methods of treatment adopted. Some of these it is my purpose now to consider, and I shall endeavour to show the principal maladies in which it will really prove useful.

***Pneumonia.*** In an epidemic of the typhoid form of this affection which occurred in the eastern United States anterior to 1822, the efficacy of blood-root was proved by Professor Ives of New Haven, who praised it very highly. He found it an important adjuvant to the ordinary course of treatment adopted at that time for this affection. Dr. Tully's experience agrees with the foregoing; and in what he calls moderate cases of the complaint, he found three parts of the tincture or wine of the sanguinaria with one part of tincture of opium amply sufficient to cure in the secondary stages. In the ordinary form of pneumonia, Dr. J. W. Francis of New York enjoined caution in its use during the first stage, as likely to prove irritating in large doses, whilst in moderate it acted as a mild stimulant and tonic. In the second stage, after the antiphlogistic measures of the first, he says it will prove very serviceable. Dr. Israel Allen of Stirling, and some others, have had recourse to this medicine as a substitute for digitalis in the chronic form of the complaint. Other American physicians give it in various stages of pneumonia, varying the dose according to the stage and condition of the system. Thus Dr. J. P. Leonard of Lime Rock recommends large doses after blood-letting in the sthenic form, and small doses in the asthenic form of the complaint. Professor Ives insists upon emetic doses in the sthenic form. Dr. Macbride of Charleston, South Carolina, has found it useful in hydrothorax, following pleuropneumonia, in sixty-drop doses of the tincture three times a day, increased until nausea is produced. Dr. Tully advocates its use in the same disease, when there is no organic mischief. In chronic pneumonia, Dr. Wood of Philadelphia states that it will be found a valuable adjuvant.

***Phthisis.*** Dr. Tully asserts that, in the subacute form of inflammation which often precedes a rapid phthisis, the cure may in general be trusted to sanguinaria and opium, after the previous use of aperients, and perhaps small doses of calomel and opium. In confirmed phthisis, it is of more value, he says, in combating and palliating symptoms than any other remedy. This, it will be remembered, was written some years ago, before many of the medicines now in use were recommended for this disease. Dr. Stevens of Ceres (1850) has seen the most marked benefit result from it in *hæmoptysis*. For this symptom it was employed by Dr. Nathan Smith and others with remarkable success, fifty years ago; and Dr. Smith's opinion then was, that it would do more towards preventing phthisis than any other remedy. This, I may observe, was mentioned before the Medical Society of London in 1810, and is published in the first volume of *Transactions* ever issued by the Society.

As an expectorant in the first and second stage, especially the latter, its action is said to be certain, and can be depended upon to arrest the cough and freely empty the bronchial tubes. I have taken some pains to estimate its true value in phthisical affections, especially in the pretubercular stage, in the second,

and in the third stages of the disease; and I can testify to its being a remedy of some importance, that can be relied upon. In bronchitis, it is not the less valuable, as I shall presently show. I gave it in three cases of that condition of body, preceding the deposition of tubercle, in which that product had not commenced to form, although there was cough, short and feeble inspiration, and a general phthisical aspect. In one, a girl of ten years, Alice S——, there was an hereditary predisposition, and many of the symptoms of phthisis in the first stage appeared to be present, but with an absence of the physical signs of the disease. She had taken cod-liver oil and other remedies without benefit, before she came under my care; and was extremely emaciated and weak. After attending to the secretions, I put her on the compound sanguinaria powder nightly, which permitted me subsequently to give her steel, and to resume the cod-liver oil. Her health improved; the cough diminished and disappeared; she gained strength and flesh, and ultimately was restored to perfect health. In another instance of the same kind, in a girl of ten years, Caroline H——, with a sluggish liver, jaundice, cough, but no deposition of tubercle, the same good result ensued, although the time was longer.

In the first stage of phthisis, wherein actual deposition of tubercle was going on, with all the symptoms well marked, in which cod-liver oil alone was not agreeing, I have combined with it small doses of the compound sanguinaria powder twice a day, with relief to the shortness of breath complained of, and improvement of the general health; and all the improvement has been attributed by the patients to the sanguinaria.

In the second stage, the tincture in moderate doses may be combined with other expectorants with very decided advantage, and will assist other remedies to cure; whilst, in the third, the relief afforded in a ready expectoration and complete emptying of the bronchial tubes is really marvellous. Patients have implored me to give them some of the red powders. One poor man, aged 55, with vomicæ in both lungs, and generally stuffed with phlegm, and much dyspnœa, declared they "did him a world of good", and that nothing had afforded him so much relief.

The expectoration becomes more easy, the breathing clearer, the spasmodic efforts at coughing less; and much improvement will result for a time in the last stage of this malady. Some bitter infusion may be combined with the sanguinaria, with decided good effect in the dyspepsia and loss of appetite sometimes present. I believe the sanguinaria in moderate doses will be found a remedy of much service in the pretubercular and first stages of phthisis, either alone or combined with other substances; and that as an expectorant, in the second and third, it cannot be surpassed. It materially helps to prolong life even in very hopeless cases. In my work on *Diseases of the Throat, Epiglottis, and Windpipe*, just published, I have stated that I have found the decoction of senega, combined with the tincture of sanguinaria, especially useful in promoting warmth and easy expectoration, in consumption associated with disease of the windpipe. Blood-root and tincture of opium give great relief in bronchitis associated with a similar condition of throat-disease.

*Bronchitis.* In the chronic form of this malady, it is in most general use, I may say, all over North America, as one of the most active and useful expectorants. Drs. Stevens and Leonard speak strongly in its favour. The latter observes, that its acrimony renders it powerful in removing the tenacious phlegm, and which it is our object to get rid of. Dr. Wood of Philadelphia—a name honoured in America, and well known in Europe—recommends the tincture, among other remedies, as well adapted for this complaint, four to six times a day, kept just within the nauseating point. It is used extensively in the various hospitals in Canada, by many physicians whom I rank as warm personal friends; and is found truly valuable as a remedy. Its value in bronchitis I have known for some years, and have frequently found it more serviceable than many other expectorants, and one that promotes the expulsion of mucus in such a manner as to afford very great relief, with a feeling of warmth and comfort to the patient. I commonly prescribe it in dispensary practice. Dr. Horace Green of New York praises it most highly in allaying the cough and irritation in some forms of follicular disease complicated with bronchial or pulmonic inflammation.

*Catarrh* in its various forms, but particularly the chronic associated with emphysema, is very much benefited by this remedy. Equal parts of the tincture and of paregoric were found by Dr. Tully to afford most marked relief. It produces a warmth about the chest, which the patients find agreeable. It is much employed in coryza, or cold in the head, promoting the discharge of mucus, and imparts a pleasing sense of warmth to the whole head. Dr. R. P. Stevens speaks highly of its virtues in this affection, and uses it in the form of an errhine, combined with cloves and camphor. I can add my testimony to its value in this malady, and have administered it in very severe cases with speedy relief. As a gargle, also, it is very efficacious.

*Asthma.* Some experience of its use in dispensary practice, has shown me that the paroxysms of asthma are much relieved by it, their severity and frequency becoming diminished. I gave it with advantage to a female aged 57, who had been asthmatic since the change of life in 1850, and who suffered from frequent diarrhœa and dyspnœa. It completely dispelled an asthmatic cough in a female of 30, who had aborted a few weeks before. She was subject to this troublesome cough on any sudden change of the weather; there was no disease of the lungs, although she belonged to a phthisical family. Among other cases of interest treated by the same remedy, was a girl of 13, with hereditary asthma; she had besides some of the symptoms of stone in the bladder, although I could detect no calculus. She passed her water in bed, was fretful and irritable, and the urine was loaded with lithates. She rapidly improved under a suitable pectoral mixture and the compound sanguinaria powders, and in a little while was restored to perfect health. Its efficacy in asthma is confirmed by other observers, and amongst them may be mentioned Dr. Eberle, who speaks well of it.

*Pertussis.* As this important affection has elsewhere met with some attention at my hands, and still is with me a subject of most earnest inquiry, I shall do no more in this place than to state that blood-root will cure the disease after a short period of trial. Professor Ives, Dr. Tully, Dr. Fitzgerald Bird, Dr. R. P. Stevens, Dr. Waterhouse, and many others, recommend it for the cure of this malady, particularly from its emetic and expectorant qualities. It is one of the regular remedies for hooping-cough throughout the United States. I have submitted a few cases to treatment, for the purpose of testing the accuracy of previous observers, and have not been disappointed in it. It should be combined with camphorated tincture of opium. I do not, however, recommend it as superior to all other remedies; it will be found worthy of trial, when other methods have proved slow or unsatisfactory.

*Croup.* Dr. Nathan Smith and others speak of it as a *sovereign* remedy in this disease. Dr. Bird recommends its use in the membranous stage, as an emetic, in the form of decoction. It expels the false membrane, and produces a stimulating effect upon ths mouth and fauces. Dr. Barton pronounces it an excellent substitute for senega in cases of malignant sore-throat, croup, and similar affections, in the form of an emetic and stimulating expectorant. Dr. Ives recommends it as highly useful in the first stage of croup, and must be given so as to produce vomiting. He observes, that many physicians have relied, for years, wholly upon it as a remedy for croup. Dr. Leonard combines tartar emetic with it. I have had only a limited experience of its value in croup, but would not hesitate to employ it urgently, when the sole recourse left to the physician is tracheotomy. In the last stages, I rely upon the strong decoction of senega to effect what the surgical operation is expected to do.

*Diphtheria.* Of the three forms of this disease now well recognised by the profession, namely, the simple, croupal, and malignant, it is in the two last that the sanguinaria will be found especially useful. In my own practice, I employ this substance as an emetic in the *croupal* form; it acts with energy, and produces a thrilling effect upon the entire mucous membrane of the fauces and respiratory tract, with a feeling of warmth. It alone, seems to impart vitality to the suffering throat, and I recommend it with the very greatest confidence. The decoction or infusion may be given in the dose of from four to eight drachms, at short intervals, until vomiting ensues. This may, then, be followed by the muriated tincture of iron, chlorate of potass, and hydrochloric acid, as recommended by others, and also by myself, in my work *On Diseases of the Throat.*

If it has been necessary to resort to the operation of tracheotomy to afford relief in the hour of danger, we must not rely upon it alone to cure. Something must be given to stimulate and to support, whilst it will at the same time prevent the pouring out of any more diphtheritic exudation; and nothing, as yet, has been found that will accomplish this more effectually than the sanguinaria, the tincture of which, in forty drop doses for adults, and ten for a child, may be

given every two hours. Without undertaking to promise too much, I feel satisfied that those who may employ this valuable and powerful remedy in the manner indicated will find no reason to regret its use; its properties are very similar to the senega in croup. In the *malignant* form of diphtheria, besides the most active and energetic treatment, as hydrochloric acid to the throat, etc., a gargle, composed of a warm decoction of sanguinaria in vinegar, is invaluable. This subject I have gone into more fully in another place.

*Scarlatina.* Dr. Tully has used the decoction as a gargle with benefit, and Dr. Stevens, of Ceres, derived great benefit from full emetic doses of the decoction in the malignant form of scarlatina. It removes the morbid secretions of the mucous membrane of the stomach, œsophagus, and fauces, and goes far towards breaking up the morbific influence of the disease. In an epidemic of scarlatina, in which the anginose symptoms were, in many cases, of the most alarming character, terminating frequently in acute laryngitis, Dr. R. G. Jennings, of Virginia, after the failure of almost everything else, including nitrate of silver, found gargles of the infusion of sanguinaria in vinegar most efficacious. They cleansed the throat of viscid secretion in the most admirable manner, and afforded much comfort to the suffering patients, allaying all irritation.

My experience of its use in scarlatina is limited; but the testimony of its value as a gargle in the malignant form, is of the most important character, and should be borne in mind when epidemics appear.

*Rheumatism* has been treated by Professors Nathan Smith, and Ives, in the acute form, with the tincture or decoction, given till its operation upon the skin and system generally becomes manifest. Very many other physicians speak of its use in the chronic form. The juice is relied upon by the North American Indians for the cure of rheumatics. I have cured some cases of chronic rheumatism by the tincture and compound powder. In one, a female of 29, the subject of leucorrhœa and rheumatism, all the pains disappeared in a fortnight, and even the leucorrhœal discharge diminished.

*Hepatic Diseases.* As might be expected in the Southern United States, where yellow fever, jaundice, inactivity of the liver, and other true hepatic affections prevail, from the nature of the climate, both as regards its high temperature and moisture, and influences arising from its geological position, the sanguinaria would receive a trial in some of them. Dr. Macbride, of Charleston, found it of utility in torpor of the liver, attended with colic and yellowness of the skin. Jaundice he submitted to frequent trials of the medicine, and with advantage. How it acts in jaundice, is a question that was warmly discussed among American physicians; but that it proves successful in curing the jaundice, none seem to dispute. Dr. A. D. Wilson cured a case of enlargement of the liver and spleen in a girl of 16, by the tincture and extract. The evidence of its value in jaundice is favourable by a host of careful American writers. I have used the drug in jaundice, in conjunction with mercurials, and with advantage; but am inclined to attribute much of the benefit derived to the influence of the latter.

*Amenorrhœa.* From what has already been stated in previous parts of my paper, it will have been seen that sanguinaria, especially in its properties, is an emmenagogue of some importance and power. Indeed, its first known use among the native Indian women was for this purpose. If the patient is plethoric and of full habit, large doses are necessary; and if combined with aloes, shortly before the usual monthly period, it will scarcely or never fail to produce menstruation. On the other hand, if anæmia is a marked feature with debility, to be successful, it is recommended to combine some chalybeate with it. In the form known as emansio mensium, it is asserted that the remedy will never fail.

*Influenza*, *Dysentery*, and *Intermittent Fever*, have been treated by it, with doubtful results.

*Diseases of the Skin.* Without dwelling at length upon its use in these, I may mention, that it will cure scabies, tinea capitis, chronic impetigo of the scalp, prurigo, and some others. Several of these were submitted to treatment in my hands with good results. The ointment has a remarkably cleansing effect in many cutaneous eruptions, and would seem to act principally by destroying the vegetable growths, which in the great majority keep up the disease. The fresh juice directly applied, is, I think, preferable to the unguent, and is thus used by the Indians.

*Surgical Diseases.* Those said to have been benefited by sanguinaria, but which I shall not dwell upon, are ill conditioned ulcers, warts, and nasal polypi; gonorrhœa, bites of venemous reptiles, and erythema from acrid and poisonous plants. In regard to its asserted powers in cancer, I will observe that it was tried internally and externally by myself and others in some painful examples of this disease, and we regretted having lost any time in giving it a trial, as we found it to be completely inert in scirrhous affections.

*Preparations.* It now only remains to mention the various preparations.

1. *Powder.* The usual dose of this as an emetic is from ten to twenty grains suspended in water. It is preferable sometimes to administer it in the form of pill, to avoid the irritation of the fauces. Dr. Leonard frequently combines it with ipecacuan. As a nauseating and stimulating expectorant, the dose is from one to five grains, repeated more or less frequently, according to the effect desired. Grain doses will produce a diaphoretic and expectorant effect; if given every one or two hours, it will then exert a sedative action, and reduce the frequency of the pulse.

2. *Compound Powder* (of the author). Take of sanguinaria powdered, two scruples; hard opium, powdered, one scruple; sulphate of potass, powdered, seven scruples. Mix. Every ten grains contain one grain of opium, two of sanguinaria, and seven of sulphate of potass. The dose is from three to fifteen grains. It is one of the most convenient preparations, and probably the least irritating.

3. *The Powder of Sanguinaria with Camphor.* Take of sanguinaria powdered, one scruple; powdered camphor, eight grains; powdered cloves, thirty-two grains. Mix. This is used as an errhine in coryza, and proves very efficacious.

4. *Infusion of Sanguinaria.* Take of sanguinaria bruised, five drachms; boiling water, a pint. Macerate for four hours in a lightly-covered vessel, and strain. The emetic dose is from half an ounce to an ounce, at short intervals, till its effects are produced.

5. *Decoction of Sanguinaria.* Take of sanguinaria bruised, six drachms; distilled water, a pint and a half. Boil down to a pint, and strain. The dose is the same as the infusion, but is a little more energetic, particularly if given warm.

6. *Preserved Juice of Sanguinaria.* This is prepared by expression from the fresh root, and adding alcohol; but I think it preferable to employ the expressed juice when required, as obtained fresh from the root. When the fresh root is broken, or the stems of the leaves, the juice will pour out in sufficient quantity for immediate use.

7. *Oil of Sanguinaria.* This may be obtained by submitting the root with water to repeated distillation. The dose would be from one to four drops.

8. *Extract of Sanguinaria.* Take of sanguinaria bruised, five ounces; water, two pints. The bruised root is to be macerated for some hours in a portion of the water, then briskly rubbed, adding the remainder, and then set by for the dregs to subside. The liquor is then to be strained and evaporated to a proper consistence. If warm water is used instead of the cold, the extract soon becomes mouldy. A more suitable form might be employed than the above. The dose is from an eighth to half a grain ter die. It may be necessary to commence with a sixteenth, according to the strength of the patient. The extract, as prepared by Tilden and Co., is a very elegant and popular preparation, and much employed.

9. *Tincture of Bloodroot*, U. S. This is the only officinal preparation, and is made as follows:—Take of bloodroot, bruised, four ounces; diluted alcohol, two pints. Macerate for fourteen days, express, and filter. It is also prepared by thoroughly moistening the bloodroot in powder with diluted alcohol, allowing it to stand for forty-eight hours, then transferring it to a percolator, and gradually pouring upon it diluted alcohol, until two pints of filtered liquor are obtained. Will prove emetic in a dose of two to four drachms; but is rather intended to act as a stimulant to the stomach, expectorant, or alterative, for which purpose twenty to sixty drops may be given every two or three hours in acute cases, and three or four times a day in chronic. (See *United States Dispensatory*, and Wood's *Therapeutics and Pharmacology*, vol. ii.

10. *Green's Tincture of Sanguinaria.* Dr. Green's formula is as follows:—Take eight ounces of the bloodroot, finely bruised, and macerate in two pints of absolute alcohol, and then prepare in the usual way. The dose is from fifteen to sixty drops every three or four hours, or three or four times a day, according to the necessity of the case. Although I do not go so far as to believe, with Dr. Green, that the officinal tincture is inefficient, still it seems to me that its strength might be increased with decided advantage, because the active

principle is readily taken up by the spirit. The absolute alcohol is for that reason also preferable to the diluted.

11. *Wine of Sanguinaria.* It is prepared in the same manner as the officinal tincture, substituting sherry wine for the diluted alcohol. The dose is the same as the tincture, and is considered more pleasant and powerful.

12. *Vinegar of Sanguinaria.* Take of sanguinaria fresh and sliced, half an ounce; vinegar, two pints. Shake it frequently, and it is ready for use in a few hours. This is the process of Dr. Jennings. I think it preferable to recommend the root to be bruised, and rubbed up with the vinegar, and filtered after a few hours.

13. *Syrup of Sanguinaria* is prepared by Wiegand as follows:—Take of bloodroot in coarse powder, eight ounces; acetic acid, four ounces; water, five pints; sugar, two pounds. Add to the powder two fluidounces of the acetic acid, mixed with a pint of the water; macerate for three days, transfer to a percolator, and displace with the remainder of the water mixed with the remainder of the acetic acid. Evaporate the infusion obtained, by means of a water-bath, to eighteen fluidounces, then add the sugar, and form a syrup, straining, if necessary. This is serviceable to young children. The dose, as an emetic, is from one to two fluiddrachms.

14. *Ointment of Sanguinaria.* Take of the powdered root a drachm; lard, an ounce. Mix.

15. *Sanguinarina.* This is the alkaloid, and has not been used in medicine; I have prescribed some of the salts of it, prepared by myself.

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## CASE OF SUSPECTED POISONING BY OXALIC ACID OR ITS SALTS: RECOVERY: WITH REMARKS.

By Thomas Skinner, M.D., Liverpool.

[*Read before the Liverpool Medical Society, January 12th*, 1860.]

The crime of secret poisoning has become so common of late, as to necessitate increased activity on the part of the profession, in order that they may detect it, if possible, in time to save the victim; if not, at least in time to detect the criminal. The safety of our patients, the safety of society at large, and our own interest, equally demand this of us.

I have thought that the following case would be interesting to you for several reasons:—First, as the crime was detected in time to save the victim, though too late to bring the evidence home to the criminal; secondly, as it is an unusual poison to be made use of for the purpose of commiting murder, especially by slow poisoning; thirdly, on account of the great difficulties connected with the detection of the poison in most cases; and lastly, because of the extensive and interesting field it lays open for further investigation.

Professor Christison, in an interesting memoir in the *Edinburgh Medical and Surgical Journal*, so far back as April 1823, made the following prophetic statement:—

"Though oxalic acid has hitherto been given through accident only, there is much reason to fear it may also be given by design, when its properties are more generally known. Much inducement is already held out to the poisoner by the readiness with which it may be administered; and it will be no small additional temptation, that, in certain circumstances, there will be as much difficulty in detecting it." (Vol. xix., p. 194.)

Case. C. W., unmarried, a young, healthy, and intelligent, but unsuspecting female, without relations of any kind, was left in possession of household furniture, bed and table-linen, and *bijouterie*, to the value of about £100. Her means of living are comparatively moderate, and she was attended by a female domestic much older than herself, who had long obtained the upper hand of her. They were the sole occupants of the house.

On the 8th of November last, the young mistress was seized with a severe rigor, followed by an attack of acute peritonitis, seemingly arising from no very evident cause. Leeches, to the number of twelve, were applied to the abdomen, and the ordinary ice and opium treatment was adopted. On November 15th, or seven days thereafter, the patient was convalescent, and put upon quinine, port wine, and food easy of digestion. On the fifth day of the convalescence, a relapse occurred. The peritonitis, which before was general, was now limited to a small spot in the left umbilical region, and, though so limited, yet the pain was exquisitely acute. The pulse was 110, hard and wiry; the tongue much furred, thirst intense, and occasional vomiting and retching. The forehead was covered with beads of perspiration, the knees drawn up, and the general aspect of the patient was expressive of extreme agony. No cause was traceable to account for this relapse, no more than for the primary attack. Leeches were again applied, to the number of eight, over the painful spot, followed by large anodyne poultices, and ice and opium, as much as could be borne, were administered internally. In two days or so the patient was again convalescent; the pulse 64, but the appetite on neither occasion returned, and there was always present an unaccountable feeling of nausea. She was again ordered port wine, and as much rice porridge as she liked, thrice daily. No medicaments of any kind were to be given, and, as my patient was seemingly out of danger, I lessened the frequency of my visits.

On December 1st I saw her in the morning. She was then still complaining of the nausea. She thought it was arising from the presence of bile in her stomach, and she asked me if I would allow her some warm water to relieve it. I consented, but the warm water, though it emptied the stomach, did not afford relief to the feeling of nausea. Before leaving the patient's house on this occasion, I began to have misgivings about the domestic, as I could not account for the nausea, so I ordered her to keep anything which might come from her mistress for my inspection.

Next day, her servant, who also nursed her and gave her all her food and medicine, called at my house between the hours of six and seven a.m., to inform me that her mistress was very ill with vomiting, and just at the point of death. Such a sudden change, entirely out of the natural course of the disease, added to my previous misgivings, made me at once suspect poisoning; I therefore took with me a clean phial in order to secure some of the vomit.

On my arriving at the house it was exactly seven a.m. I found the messenger coolly cleaning the windows and humming to herself, instead of attending to my patient, who was then almost dying. She opened the door, and told me that her mistress was "*bilious*, that she was often complaining this way, that she (the servant) was tired of her place, as her mistress was no sooner well of one thing than she was ill of another, and she was not able to sit up all night and work all day." After this heartless tirade was delivered, which, to say the least of it, was false, I hurried to the patient, and secured six ounces of a greenish fluid, which I *saw* her vomit. The following was her condition:—Her extremities were quite cold, the forehead and cheeks moist and clammy; the pulse 84, but small and easily compressible, the respiration impeded; the tongue was thickly furred, the colour of it like washleather, and red round the edges; the eyes were lustreless which twenty hours before were bright and shining; the cheeks were fallen in, the countenance anxious, and the general expression cadaverous. She had an uncontrollable thirst, which had to be gratified, despite the urgency of the retching, vomiting, and hiccup; above all, she suffered most from a severe *burning* pain internally, at the scrobiculus cordis, tender when touched, and increased on pressure. The pupils were dilated, otherwise the organs of special sense and of volition were intact, but from sheer exhaustion she was unable to give me any particulars, beyond the fact, that she had been vomiting more or less from the time of my last visit (a space of twenty hours). The moment that I saw her, I had not the slightest doubt she was labouring under the influence of an irritant poison.

As the patient had been vomiting for upwards of twenty hours, and was rapidly passing into a state of collapse, further emesis was needless; and, as the poisonous substance was as yet unknown, no direct antidote could be relied on; I therefore determined, if possible, to stop the violent action of the stomach, and to rouse the system. For these purposes, a large mustard poultice was ordered to the hypogastrium, bottles of hot water to her feet and along her sides, some sodawater to be drank, and an experienced nurse to be got; while I went myself to the nearest apothecary for some pills of creasote and morphia, one of which I administered with my own hands. As I had an appointment with my friend Mr. Marsh about this time, I fulfilled it, and begged of him that he would see the case along with me, which he kindly did.

On our arrival, the patient was much in the same condition, only the vomiting and retching were not so violent, and she was better able to answer our questions. After a careful examination of the patient, we both came to the conclusion, that either the young woman had been poisoned by some com-

mon irritant, such as oxalic acid, and was very likely to die; or, if the symptoms were arising in the course of disease, that she would surely die. Having so little hope of her recovery, at our suggestion, she expressed a wish to receive a visit from a clergyman and a lawyer.

We then ordered her draughts of medicinal hydrocyanic acid in effervescence with bicarbonate of potass and lemon-juice, one every hour until the vomiting and hiccup should cease. At the same time, a pint of beef-tea, and four ounces of port wine were to be administered *per anum*, one half at a time, and as much ice as she chose to swallow. From the first moment of my suspicions, a sharp espionage was instituted over the movements of the domestic, and all communication between her and her mistress was at an end for the present, the cooking being done in the bedroom, by the new nurse. The patient and her fresh attendant were at the same time informed of our suspicions, and of the party suspected, in order the more effectually to prevent the patient from receiving anything, not even a glass of cold water, from the hands of the domestic. For this practice the profession are indebted to the recent trial of Dr. Smethurst, and the excellent advice resulting therefrom, which appeared as a leader in the *Medical Times and Gazette* for September 3rd last. The writer states—"We think it may be laid down, then, as a general rule, that in all cases of suspected poisoning, the medical attendant should first communicate his suspicions to the patient."

On our visiting the patient in the evening, we found the pulse 74, and rather full, the face flushed; the vomiting and hiccup had entirely ceased, and reaction was fairly established.

Next day, she had the following symptoms. Although they were not witnessed by either Mr. Marsh or myself, yet the patient and the nurse are so certain of their occurrence, and so clear in their statements, that I give full credit to their testimony:—They were involuntary twitching between the shoulders and back of the neck, corresponding to the action of the trapezii and rhomboidei muscles, as the head was drawn backwards and the shoulders towards each other. The same involuntary twitchings were experienced and witnessed in the flexors of the upper and lower extremities, even to the fingers and toes. They were unaccompanied with rigidity, frequent but short in duration, and more distressing and annoying than actually painful. The patient informs me that she often laid hold of a limb with her hand in order to stop the action, but it was quite impossible; and she thinks, that if she had been in an erect posture she must have fallen to the ground. She describes the action as irregular, both in regard to the limb or limbs affected and to the period of their occurrence. The twitchings extended over a period of at least twenty-four hours, and they did not occur until some hours after the vomiting ceased. During the occurrence of these symptoms, a copious flow of a dark-coloured fluid passed from the patient *per vaginam*. So copious was it, that it saturated the napkin and bed-clothes. I have lately seen the bed-clothes, the stains are very large and dark coloured, and they have resisted all domestic efforts at removal. I do not profess to be able to account for this discharge. The catamenia had appeared shortly before, and have appeared since her illness; no ovum ever came away, and there was no reason to suspect anything of the sort.

In a day or two from the date of the excessive vomiting and collapse, our patient was thoroughly convalescent; her appetite was such as she had not experienced for months; and within a week she was independent of our services, even as regards the everlasting nausea, from which, she tells me, she had suffered now and again for the last two years; in other words, while she was served by the attendant.

In the meantime, the contents of the phial were being carefully tested for arsenic, antimony, lead, mercury, zinc, copper, and iron, but no trace of them was found. It was then examined for oxalic acid and strychnia, but no sign of the presence of either of them made its appearance. Under the microscope there was nothing to be seen but mucus-corpuscles, and the *débris* of partially digested starch granules, with epithelium. The liquid was greenish (but at the first, I am informed, it was of a reddish-brown colour); it was highly acid, and somewhat viscid; specific gravity, 1·010. It was subsequently analysed by Dr. Muspratt, and found to contain "a small portion of phosphoric acid, a small quantity likewise of sulphuric, and a large quantity of hydrochloric acid, the chief part of which, as also of the other compounds, were found to be in a state of chemical combination," and quite compatible with the absence of poison.

Although no poison was found, it is not to be wondered at, as the vomiting had been going on for twenty hours before the fluid vomited was obtained. The collateral evidence was so very suspicious, that the woman, whose appearance was most unprepossessing, and whose previous character was bad, was summarily dismissed; but without any formal imputation being put upon her conduct.

REMARKS. *(a) The question of Poisoning.* The suspicion of poisoning rests on the following data, part of which did not transpire until a day or two after the violent vomiting and collapse:—

1. The patient is young and unsuspecting, an orphan, friendless, and has no one to inherit her means.

2. This was long known to the domestic, who was much her senior, and who always took the upper hand with her.

3. On various occasions during her illness, but more particularly on the day of the vomiting and collapse, the domestic said to her mistress, that "she was quite astonished she had not made some arrangement about her affairs, as she could not have long to live."

4. The domestic knew that I was in attendance, and yet she allowed the patient to vomit for nearly twenty hours without informing me, or without suggesting my being called; and when she did call me, it was only at the repeated request of her mistress. Most likely this delay was the cause why no poison was found.

5. The domestic did not act up to my orders; namely, to retain everything which might come from her mistress for my inspection. I am informed by my patient, that the basin in which she vomited was more than six times emptied during the night; and the contents were thrown into an ash-pit, where no trace of them could be seen; and, even after I had secured some of the vomit, on my return from the druggist's, the basin had again been emptied, and was scrupulously washed clean and dried. The woman was not, as a rule, addicted to cleanliness, but the reverse.

6. I had also ordered the domestic to give the patient nothing but rice porridge. I have learned since, that the patient never got any—the domestic, of her own accord, having given oatmeal gruel instead. The gruel was administered every half hour or so, but it always came up instantaneously, even before she had time to lay down the bowl. (None of this gruel had been given for many hours before my arrival.) On Mr. Marsh and myself cross-examining the patient relative to the taste of the gruel, she said she thought it was peculiar, and distinctly different from the taste of the tea and other liquids, of which she had partaken about the same time. She added, that, as her thirst at the time was very great, and much increased by each dose of the gruel, she drank it with such avidity, that she took no particular notice of the taste when swallowing it; this much she does remember, that it came up much more *sour* than when it went down. The patient has lately informed me that she has often been given, by the same party, a somewhat similar gruel before this last illness, but it never did more than nauseate.

7. The symptoms were not those which might be expected as a termination or a sequel of peritonitis; while in every respect they tallied with the effects of an irritant poison, such as oxalic acid or one of its salts.

8. It will be remembered that I had ordered on one occasion twelve, and on another eight, leeches to the abdomen. I have been told since, that they did not fix well, that they soon came off, and, with one exception, they all died immediately, the only exception dying next day. In a case of poisoning by oxalic acid, recorded by Dr. Arrowsmith, and quoted by Professor Christison, *the leeches bit, did not fill, and they all died*, though the leeches were not put on for several hours after the poison was taken. (Christison, *On Poisons*, 4th ed., p. 223.)*

9. Lastly, the entire disappearance of the nausea which had existed from November 8th (more than three weeks), to say nothing of previous attacks of it during the last two years; the cessation of the vomiting and collapse by the administration of a few simple means; the toleration by the stomach of beef-tea, fish, flesh, and vegetables, a day or two following the excessive vomiting and collapse; and the otherwise rapid and complete convalescence on the total separation of the domestic from her mistress; go to prove the case as one of poisoning, and point to the attendant with suspicion.

*(b) Nature of the Poison administered.* Although in this case no poison has been chemically detected, I do not suppose there can be a reasonable doubt that the symptoms manifested

* In December 1857 (or two years ago), I applied six leeches to the os uteri of the same patient, none of which died for months afterwards.

were those arising from the action of an irritant poison. It remains for me to state what I believe to have been the nature of the poison administered, and to give my reasons for so believing. In the first place, I have no hesitation in affirming that the poisonous agent was no other than oxalic acid, or one of its salts; administered at first in small but increasing doses, and ultimately in such a quantity as was likely to be suddenly fatal. The following are the data on which I found my belief:—

1. We have the attack of acute peritonitis, without the slightest exposure to cold, damp, or fatigue; and the system previously, and at the time of the attack, robust and healthy.

2. The relapse of the inflammatory action, also arising without any evident cause.

3. The death of the twenty leeches used on both of these occasions; coupled with the fact, that, on a previous occasion, six leeches were applied on account of inflammation of the cervix uteri, none of which died.

4. The constant and unaccountable sensation of nausea and oppression.

5. The sudden accession of the vomiting and retching, with the *burning* pain at the *pit of the stomach;* their long continuance, and the singultus and deadly collapse.

6. Above all, on the following day, the *spasmodic twitching* of the neck and between the shoulders, as also of the upper and lower extremities.

I know of no agent which is capable of producing those various phenomena, except oxalic acid or its salts.

As it is not generally known that oxalic acid has the power of producing spasmodic twitchings of the parts I have alluded to, allow me to state the following facts. In a case of poisoning by oxalic acid, recorded in the *Lancet* for 1851, vol. i, page 329, by Mr. Bourne of Nottingham, the wife of a sergeant took three drachms in three ounces of water, to commit suicide, but recovered. It is there stated: "Subsequently, there were convulsions, spastic contractions of the muscles of the jaws and extremities . . . . . twitching of the muscles of the face, and insensibility." Mr. Bourne adds: "For a month afterwards, the face and extremities were subject to spasmodic twitchings." In this case, it will be observed that the quantity swallowed was comparatively small, three drachms; moreover, within a quarter of an hour of the ingestion of the poison, the stomach was emptied by the stomach-pump, and washed out four or five times. These facts are important, because I feel convinced that the development of the nervous or secondary symptoms depends much upon the smallness of the dose and its being diluted, so that absorption may take place. Christison says, that dilution has nearly the same effect as increase in quantity, and that the symptoms vary according to the quantity given, and the degree to which it has been diluted. He adds: The symptoms peculiar to oxalic acid are seen most characteristically when the acid has been so given as not to prove fatal for an hour or more. (*Edin. Med. and Surg. Jour.*, vol. xix, pp. 182-183.) In further proof of those spasmodic twitchings being pathognomonic of certain cases of oxalic acid poisoning, there is a very full and carefully detailed case recorded in the *Edinburgh Medical and Surgical Journal* (vol. xiv, p. 607), by Mr. Fraser, Deputy Inspector of Hospitals at Gibraltar, in 1818. Half an ounce of oxalic acid was swallowed by mistake for Cheltenham salts. A good deal of it was vomited, and antidotes, as magnesia, etc., were given. General agitation and violent spasms and hiccup were observed to recur at irregular intervals for eleven days, which increased in violence, until he died on the fourteenth day from inanition.

Toxicologists are agreed that the salts of oxalic acid, particularly the oxalate of ammonia and the binoxalate and quadroxalate of potassa, produce the same symptoms as the pure acid, although they are not so caustic in their mode of action. In a case of poisoning by the binoxalate, recorded by Dr. Webb, in the *Medical Times and Gazette* of last year (vol. ii, p. 378), he states: "Since I last saw the case, he has suffered from spasmodic contractions of the hands and from cramps in the legs." The quantity taken was about a quarter of a teaspoonful, or fifteen grains.

Professor Christison, Dr. Coindet, Orfila, and others, when experimenting on dogs and other animals with this poison, have invariably observed twitchings of the extremities, and tetanic convulsions, in the form of opisthotonos, to precede death. The facts which I have stated, prove that under certain conditions of dilution, and when there is not too much given, or where there is not too much left in the system, so as to produce rapid death, but to favour absorption, convulsions and spasmodic twitchings have also been observed in man. I think, then, I am justified in concluding that the poison administered in this case was none other than oxalic acid, or one of its salts.

In conclusion, it has been a source of deep regret to me that I did not examine the fæces, blood, or urine of my patient. I felt so confident of finding the poison, whatever it was, in the vomited matters, that I entirely overlooked these other sources until it was too late. I regret this circumstance, the more so, as I believe that this case is about the first one on record where oxalic acid or any of its salts have been used for criminal purposes, particularly as a slow poison; and it would have been a most important point gained, if we could have established the value of the examination of the blood and of the excretions in such cases.

I shall endeavour, on an early occasion, to lay before the Society the amount of our present knowledge on this subject, with such original observations and experiments as I shall be able to bring to bear upon it.


# British Medical Journal.

SATURDAY, FEBRUARY 11th, 1860.


## THE MEDICAL SOCIETY OF LONDON.

The readers of this Journal, who have from time to time been instructed by the reports of the valuable papers read before the Medical Society of London, are for the most part probably not aware that this venerable and flourishing institution has been for some time subjected to the influence of party agitation—an influence which, if allowed to continue in the way in which it now exists, can scarcely fail of doing immense injury. We do not allude to honourable ambition for distinction in the Society, but to a desire for prominent position, which almost irresistibly gives the idea that individual honour is preferred to public welfare. Before entering on a further examination of this subject, a few explanatory remarks are perhaps necessary.

When, in 1850, the old Medical Society and the Westminster Medical Society were amalgamated under the name of the Medical Society of London, the mode in which the vacant places were filled up at the annual election of officers was by the free selection, by each Fellow, of any names he pleased from a complete list of the Society. No attempt was ostensibly made to guide his choice. In 1854, objections were raised against this system; and a new mode was adopted, by which there was sent to every Fellow of the Society, previously to the election, a list prepared by the Council, containing the names of the then existing officers, distinguishing those eligible for re-election; alongside of which was placed another list, containing twice the number of names necessary to fill the vacancies. At the same time, it was free to the Fellows to choose any other names. Under this plan, a result followed which was most remarkable, and which could not fail to rouse jealousy. For three years in succession, the Presidents of the Society were chosen from officers of the same hospital; and in the list which was issued in February of last year, the name of a fourth medical officer of the same institution was placed first of those proposed for the presidential chair. In addition to this, there were other details which gave the idea of a dictatorial power being exercised; and, as would naturally be the case in a republican institution under such circumstances, a rebellion was provoked. The result of this was that, when the list of new officers was

read at the anniversary meeting in March 1859, it was found that the Council list had been entirely set aside; and a staff, selected evidently on the most liberal principles, was declared to possess the confidence of a majority—we believe a very large one—of the Society.

In the entire displacement of the old officers, it cannot be denied that there was some apparent amount of injustice. But the course taken was, we think, the only one that could have been well followed under the circumstances, to prevent the charge of any invidious selection being made. What the Fellows of the Society determined to do, was to exercise to the fullest extent their right of choosing their own officers—nothing more. They knew well how injurious the permanent limitation of power to a few is to the interests of such an institution as the Medical Society. They knew that, a good many years ago, the determined retention of the presidency of the Society by one single physician for a period of about twenty years was the occasion of a schism, and of the weakening for a time of their body by the secession of a large number of members to form the Medico-Chirurgical Society. New blood was felt to be wanted to give increased vigour; and it must be obtained, even with the sacrifice of personal feeling.

And now the conduct of those who were placed in a minority demands consideration. Several of them were men who had in times past done service to the Society—service which no one would have the least desire to underrate. But, most unfortunately, the course taken by the minority has been such as inevitably tends to efface the gratitude and respect for them which must have lingered in the breast of every Fellow who knew their past labours, and to give rise to the idea that with them the welfare of the Society was a secondary consideration to the enjoyment of office. Instead of quietly acquiescing in the will of the Fellows, and waiting patiently for those expressions of good feeling which would without doubt have from time to time been manifested in the due apportionment to them of their share of the honours and burdens of office, they have adopted towards the Council a line of conduct which can only have tended to impede this body in its desire of doing good.

In the course of the present session, the law of 1854 has been repealed, and a new one has been substituted, by which the Council are to recommend a single list of names to fill the vacant offices, but in such a manner as to remove, as far as is possible, the appearance of dictation. The list has not yet been agreed on by the Council; but, notwithstanding this, and even before a single name has been decided on, we are surprised to hear that a meeting has been held by those of whom we have already spoken, for the purpose of organising a list in opposition to that which is to be issued by the Council. This proceeding is not wise; the movement is premature. It should most certainly have been postponed until after the Council had issued their list; and then, if it was apparent that the names were chosen on too limited a basis to deserve the approval of the Fellows, by all means let the list be set aside by a majority.

Under no circumstances, however, do we believe that the Fellows of the Medical Society of London will submit to dictation, real or apparent. Its places of honour, as in every well governed republic, are for those who deserve and possess the confidence of the majority; and private feeling and personal motive must never be allowed to interfere with the general interests of the body.

Can it be alleged, in justification of the proceedings of these gentlemen whom we may term the opposition, that, under the *régime* of the past year, the affairs of the Society have not been prosperous? Certainly not. During the period to which we have referred, the state of the Society has improved materially. Mr. Hilton, by the judicious manner in which he has wielded the power committed to him, has rendered his presidency very popular; and the steady supply of excellent contributions, together with the improved attendance at the meetings, show that the officers have been doing their duty well, and that, in consequence, they have deserved and received the support of the Fellows of the Society.

## THE WEEK.

The Universities of Oxford and Cambridge, which for so long a time turned their backs upon the physical sciences, are gradually accommodating themselves to public opinion in this matter, and are at last making advances towards a heartier recognition of these branches of learning. Dr. Acland at Oxford and Dr. Humphry at Cambridge are more worthily representing medicine in these renowned seats of learning than any of their predecessors. Dr. Daubeny, the Professor of Botany and Chemistry at the former University, is associating Oxford with other and more exciting topics than either moral philosophy or classical literature; and this week we find that Miss Burdett Coutts has presented a fine collection of the Devonian fossils to the University, together with a sum of £5,000 for the foundation of two geological scholarships, to be called the Burdett-Coutts scholarships. The subjects of examination are to be geology, with so much of experimental physics, chemistry, and biology, as is requisite for an understanding of the principles and application of geological science. We are particularly glad to have to record the sowing of this new seed, which cannot fail to bear good fruit hereafter, and to react to a certain degree upon the study of our own profession at these seats of learning. It must be a matter of regret to our body generally that the university element is so sparse amongst us; and we see no reason why the schools of medicine in both Universities should not take a much higher stand than they have hitherto done.

A singular instance of the chaotic condition of the great metropolitan sewage question at the present moment was presented at the Thames Police-Court on Wednesday. It appears that the medical officer and the sanitary inspector of the Poplar District summoned the landlords of certain premises, in order to show cause why an order should not be made on them to provide drains and sufficient privy accommodation, with water supply to the same, etc. Mr. Yardley granted the order, as far as cleansing cesspools went; but at the same time gave it as his opinion that the Thames should not be further polluted by the construction of drains into it. Thus he is entirely at variance with the medical officer and the sanitary inspector of the district, on the great question of the construction of new drains, just at the present moment; and we must say that we think he has taken the right view of the question. With regard to the laying on of water and the construction of traps, the landlords gave expression to a very common complaint in

low neighbourhoods, namely, that "the traps and drains would be torn to pieces, and the waterpipes cut." The ignorance and the destructive tendencies of the very lower classes of the population are, without doubt, greatly prejudicial to the spread of sanitary regulations in districts most urgently calling for them; and time only will cure the evil. The visiting of landlords with severe penalties for not having the power to keep down this destructive tendency ought to be used very sparingly, otherwise a reaction will be caused in the public mind against a very useful movement. A meddlesome sanitarianism is almost as bad as a meddlesome midwifery.

## THE LATE ROBERT BENTLEY TODD, M.D., F.R.S.

It is not often that a profession has to mourn the loss of one whose death is at once so great a general calamity and special bereavement, a public misfortune and private grief, as Dr. Todd's. And we can hardly bring ourselves to regret that the rarity of such men allows us but seldom to realise how much we lose when they are taken from us. As a teacher, a writer, a physician, a friend, Dr. Todd held a position, both among his professional and non-professional friends, that no one exactly shared with him; and his death has made a chasm that can hardly be filled by any who survive him. But, while in thinking of our loss our feelings are those of unmixed sorrow, there is (and there ever is in such attempts) a something of a painful pleasure in the task that we propose to ourselves—the task of offering in these columns a humble tribute to his memory, and endeavouring imperfectly—and it cannot but be very imperfectly—to recall and record the labours of his life, and the worth of his character.

Dr. Todd's career is a striking example of the irresistible force that is possessed by native strength of character, untiring industry, and a definite object. Dr. Todd came to London, to use his own expression, "without a sixpence to help himself with", without interest, and almost unknown; but, in reliance on his own powers and efforts, he fearlessly entered at once the difficult path of metropolitan practice. He determined to become, if possible, *the* anatomical physician; to base his practice and his success on a knowledge of the structure and functions of the body. He has told us this himself; and his success has clearly shewn the soundness of judgment that suggested his resolution, and the reality of that want that he determined if possible to supply. There are now many anatomical and physiological physicians; but when Dr. Todd started he stood alone, and he may fairly be said to have been the first of his school.

With the special object that he had in view, he threw himself at once heartily into anatomical and physiological pursuits, and soon became a distinguished teacher of those subjects. He was at first connected with the school of the Westminster Hospital, and we believe also with the Aldersgate Street School of Medicine. But, soon after King's College was founded, he, in the year 1836, transferred his allegiance and his energies to the new school, of which he was from the first the main prop and stay; which has owed its great success more to him than to any one else; and with which he maintained his connexion until within a few weeks of his death. Dr. Todd and King's College are so united that we can hardly think of them apart. He may almost be said to have created the hospital: he was its physician from the very beginning; and for the first year voluntarily undertook and discharged the duties of secretary as well. He also took a very active part in establishing St. John's House Training Institution for Nurses, an establishment which has since earned so high a reputation. The nursing of King's College Hospital is now entirely carried on by the members of St. John's House; and there is also a large staff of nurses for attending private cases.

Dr. Todd achieved a great position in three distinct characters—as a physiologist, a clinical teacher, and a practising physician. It is rare for one man to combine so varied a success; and we can only point to two other examples who in this particular—the association of large practices with a devotion to pure science—can be compared with him; namely, Sir Benjamin Brodie and Mr. Bowman; and, though undoubtedly his acquisitions and tastes as a physiologist most advantageously moulded his practice, and imparted to it its "rational" character, which was the source of its soundness, and therefore the secret of its success, yet he has often told us that he thought he should have earlier got into large practice, and have acquired a greater reputation as a physician, if that reputation had not been diluted with his name as a physiologist. So difficult is it for us matter-of-fact English to believe that a man can be at the same time the cultivator of a speculative science, and the practical observer and experienced physician.

As a physiologist, Dr. Todd was a teacher, an editor, and an author. As a lecturer, he was smooth, simple, and lucid. As far back as we remember him, he never used any notes, or the slenderest possible. He went smoothly on from beginning to end, and charmed his class into an irresistible attention. His teaching was eminently demonstrative; he availed himself largely of diagrams and specimens. His phraseology, which was always appropriate, was simple to a degree; it was free alike from the affectation of ornament and the affectation of a severe exactness; it had the advantage of never attracting attention from the subject; he used language in its best way—as the unthought-of vehicle of his thoughts. One great element of value in Dr. Todd's physiological teaching was, that it was eminently practical; he was continually making practical application of the truths he was enunciating, and in this way his avocations as a physician exercised a reflected influence on his teaching as a physiologist. Dr. Todd's success as a teacher of physiology is sufficiently attested by the number of his pupils who have distinguished themselves in his special subject, and several of whom are now holding appointments in the schools of this metropolis as teachers of physiology. It is the highest test of the merit of a teacher, when he not only imparts his knowledge, but infuses into his disciples his enthusiasm and his tastes.

As a writer on physiology, Dr. Todd's works were very voluminous, and must have involved so much labour that one can hardly imagine how he spared time for anything else. The mere editing of the *Cyclopædia of Anatomy and Physiology*—a work that embraces the entire compass of those sciences, and registers and represents their progress during the last quarter of a century, when their advance has been more expanding than ever before—seems almost like the work of a lifetime. Dr. Todd's first work was on the *Anatomy of the Brain*, in which he initiated a physiological, and not a mere descriptive examination of that organ. In the *Cyclopædia of Anatomy*, he contributed more articles, we believe, than any other author. But the work that added most to his reputation as a physiologist was the *Physiological Anatomy and Physiology of Man*, a work which he undertook and carried out in conjunction with Mr. Bowman, one of his earliest and most distinguished pupils.

As a medical writer, he was the author of a work, his first, on *Gout and Rheumatism*, which early made him an authority on those subjects: but he was best known for his *Clinical Lectures* delivered at King's College Hospital, and published first in the *Medical Gazette*, and subsequently in the *Medical Times*, the majority of which have been since collected and published in three separate volumes, the publication of the last of which—that on *Acute Diseases*—may almost be said to be posthumous. These lectures, which are models of clinical

teaching, were reported almost word for word as they were delivered by his successive clinical clerks, Mr. James Salter, Dr. Hyde Salter, Dr. Beale, and Dr. Conway Evans; and there can be no doubt that they contributed more to the extension of his practice and his reputation as a physician than any other thing.

His active useful life, short as it was when measured by years, but long indeed if estimated by its results, was brought to a close before he had completed his fifty-first year. Latterly, the public have claimed so large a share of his time and energy, that he was compelled to resign his duties as a teacher of medicine, and only in December last he gave his farewell address in the Institution which he loved so well. He was taken from us while actively engaged in his useful daily work. During the night of Sunday, January 29th, Dr. Todd appears to have vomited blood, but he reached home on Monday morning, and was able to see several patients. About 2 P.M., the vomiting returned with increased violence, and rapid prostration soon followed. Three hours afterwards he appeared to rally a little, but another attack of hæmatemesis occurred, and from this time he gradually sank. He died about 8 o'clock, in his consulting room, only a few hours after he had prescribed for his last patient. We hear that a *post mortem* examination was performed, and it was discovered that the hæmorrhage had proceeded entirely from capillary vessels, partly from the stomach, but also from the lower part of the ileum, cæcum, and part of the colon. A gradual oozing had in all probability been going on for many hours before death. The liver was cirrhosed, but the disease had not advanced to an extreme degree. The organ, we are told, was somewhat larger than the healthy liver, but its surfaces were very uneven, and its tissue indurated.

Our contemporary, the *Dublin Medical Press*, of Wednesday last, has a few earnest words which show the estimation in which Dr. Todd's memory is held by his countrymen. We cannot do better than quote them:—

"The death of Dr. Todd is a loss to Ireland which cannot well be repaired; for filling, as he did, a high position in the British metropolis with distinction to himself and credit to his native country, such a national representative in that great arena is not to be replaced without delay. Dr. Todd's success in the largest field of professional competition in the world was a triumphant answer to those who assert that success cannot be achieved by ability, assiduity, and perseverance alone, and that patronage and connexion are essential concomitants; for to the former alone was he indebted for the public confidence he enjoyed. His history also affords gratifying proof that honest, upright, and honourable professional conduct largely contributes toward the attainment of the highest honours which the public can bestow."

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## THE LATE THOMAS ALEXANDER, C.B.,

### DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE ARMY.

We extract the following sketch of the services of the late worthy Army Director-General from the *Times* of Thursday.

Thomas Alexander served twenty-five years and three months on full pay, nineteen years and six months of which were passed on foreign service thus—in the West Indies, five years six months; in Nova Scotia, four years seven months; in Canada, three years two months; at the Cape of Good Hope, two years two months; in Turkey and the Crimea, two years four months; in Canada, six months. He entered the service on the Staff in 1834, and proceeded to the West Indies, where he did duty for the period above stated, at the end of which he came home in charge of invalids. He remained at home only nine months, when he embarked for Nova Scotia, where he did duty till he was removed, in August 1846, as second class staff surgeon, to North America, where he served with the Rifle Brigade as regimental assistant-surgeon till he embarked for the Cape of Good Hope in 1851, and served with the 60th Rifles for the next two years throughout the Caffre war. He was principa medical officer of the expedition despatched beyond the Kei, and he was thanked in General Orders for his services throughout the war.

In 1854 he was promoted to the rank of first class staff surgeon, and received orders to join the Turkish expedition. He was in charge of the Light Division under Sir George Brown, and landed at Gallipoli, with the first detachment of the expeditionary force, consisting of his old comrades of the Rifle Brigade, and a detachment of the Royal Engineers, Sappers and Miners, on the 6th of March. With the Light Division he remained to the close of the war. At the Alma, his tenderness, his inexhaustible endurance, and noble devotion in the most terrible trial to which a surgeon, overwhelmed with calls on his utmost powers, and poorly provided with the means of relief, could be exposed, were especially remarkable. At Inkerman, for hour after hour, day after day, he toiled through scenes which those who have not witnessed a battlefield and the terrors of the hospital tents can never imagine or conceive, upheld by the noblest sense of duty; and many men now alive can bear witness to the heroic calm and skill which saved life and limb for them, and the prodigality of care he bestowed on others, regardless of everything but his sacred duties. In Lord Raglan's despatch, he is described "as deserving to be most honourably mentioned." All through the winter he never left his post—nay, more, from the time he joined the Light Division till the British army quitted the shores of the Crimea, he never was absent from his duty a single day. On the 12th of January, 1855, he was appointed Deputy Inspector-General; and he went to Kertch with Sir George Brown, as principal medical officer of the expeditionary force. In General Codrington's despatch of March 18th, 1856, in answer to an address from the House of Commons, Dr. Alexander is also mentioned; and he was recommended by Dr. Andrew Smith for promotion to the rank of Local Inspector-General for service during the Russian war.

Dr. Alexander remained at home just one month and twenty-one days, when he was again ordered for service in Canada, as principal medical officer, but, after performing that duty for six months, Lord Panmure nominated him one of the Royal Commissioners to inquire into the sanitary state of the army, and he returned to England to discharge the functions of his appointment. He was also selected to draw up a new code of regulations for the management of barracks and hospitals, and, on the retirement of Sir Andrew Smith, on the 22nd of June, 1858, Dr. Alexander was appointed Director-General of the Army Medical Department, which appointment he held up to the day of his death. He was also one of the Honorary Surgeons to Her Majesty, and a Companion of the Bath.

About three weeks ago he was interrupted in the usual assiduous discharge of his duties by an attack of gout. A few days since the symptoms became alarming, but he was better on Tuesday evening. In the course of the night he was, however, severely attacked, and he died at seven o'clock yesterday morning, at his residence in Norfolk Square, the immediate cause of death being, it is supposed, determination of gout to the heart.

He leaves a widow to mourn his loss, and in her grief she has many deep sympathisers, for few men ever had a larger number of sincere friends among those whom he admitted to his acquaintance than Dr. Alexander. Simple in his tastes and frugal in his habits, though generous and genial in his demeanour and conversation, he did not seek the society of the great, but, retired within the circle of his duties and of his private friendships, he there gained the approbation of his conscience, and the love of those among whom he lived and laboured.

# Association Intelligence.

## BRANCH MEETINGS TO BE HELD.

| NAME OF BRANCH. | PLACE OF MEETING. | DATE. |
|---|---|---|
| Bath and Bristol. [Ordinary Meeting.] | York House, Bath. | Thurs., Feb. 23rd, 7 P.M. |
| Metrop. Counties. [Adjourned Special General Meeting.] | 37, Soho Square. | Friday, Feb. 24th, 4 P.M. |

## SOUTH MIDLAND BRANCH: MEETING OF COMMITTEE.

THE CASE OF DR. BARKER AND MR. CHAVASSE.

Northampton, Feb. 3rd, 1860.

Sir,—We are requested to forward to you the subjoined proceedings of a Committee Meeting of the South Midland Branch of the British Medical Association, for insertion in the Journal.

We are, sir, your obedient servants,

Robert S. Stedman,
Henry Terry, jun., } *Hon. Secs.*

To the Editor of the British Medical Journal.

At a Committee Meeting of the South Midland Branch, held at the George Hotel, Northampton, on Thursday, Feb. 2nd, present Dr. Webster (President); Dr. Francis (Northampton); Dr. Prichard (Abington Abbey); Mr. Marshall (Moulton); Mr. Daniell (Newport Pagnell); Mr. Slinn (Ampthill); Mr. Clark (Wellingborough); Mr. H. Terry, jun., and Mr. Stedman (Hon. Secretaries), the following resolutions, passed at a meeting of the Committee, held at Wellingborough, on Tuesday, Dec. 20th, 1859, were read.

1. That it is the opinion of this Committee that Mr. Pye H. Chavasse's charge against Dr. T. H. Barker, of having made an unacknowledged use of his works, is substantiated by a comparison of the two books, and is admitted by Dr. Barker's representative at this meeting.

2. That it is the opinion of this Committee that the second letter of Messrs. Rogerson and Ford to Mrs. Barker, is not a justification of the subsequent letters from Dr. Barker to Mr. Chavasse.

3. That it is the opinion of this Committee that the explanations given by Dr. Barker, in the case of Mr. Chavasse, are not satisfactory to this Committee.

4. That this Committee declines to express any opinion on the case referred to by "Judex".

It was unanimously agreed that these resolutions be confirmed.

A letter from Dr. Barker was then read, resigning his membership of the South Midland Branch.

The following resolutions were subsequently agreed to.

1. That this Committee feels that it has no alternative but to recommend to the Branch the acceptance of Dr. Barker's resignation.

2. That it is expedient that the proceedings of this and the last Committee Meeting be published in the Journal.

# Reports of Societies.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 24th, 1860.

F. C. Skey, Esq., F.R.S., President, in the Chair.

ON A FORM OF SECONDARY SYPHILITIC INOCULATION.

BY HENRY LEE, ESQ.

In a previous communication, published in the last volume of the *Medico-Chirurgical Transactions*, Mr. Lee had described two distinct forms of primary syphilitic inoculation: one of these was found to present the characters of the adhesive; the other, of the suppurative inflammation. The former was proved not to be again readily inoculable on the patient himself, while the latter was capable of being reproduced an unlimited number of times, either in the same patient, or in another individual. The first was regarded as a disease which, in its natural course, infected the patient's system; the second as a local disease requiring only local treatment. It had also been shown that indurated sores, which did not ordinarily yield a discharge capable of being again inoculated upon the patient, might, under conditions of artificial irritation, furnish an inoculable secretion. The inoculations thus produced were, however, quite distinct from those which resulted from the inoculation of the discharge of naturally suppurating sores. The author now stated that the effects of one form of secondary syphilitic inoculation were very similar to those produced by the inoculation of the secretion from a primary sore affected with the characteristic and specific adhesive inflammation; for although not ordinarily inoculable, secondary syphilitic affections might, under conditions of increased activity, give rise, by contact, to a disease which, in its physical characters, very much resembled the primary indurated sore.

A case was given, in which a woman, having suffered from secondary disease, was married, and lived with her husband nine months without communicating to him any disease. The wife then became pregnant. The increased activity of the uterus was accompanied by an abrasion or ulceration of the os uteri, and then the husband presented a disease with all the characters of a primary infecting chancre. In a second case, a grandmother was infected at the age of sixty-six, from her own grandchild, who inherited the disease from her son. In a third case, the marks of a secondary eruption, together with a slight remaining induration from a primary sore, existed at the time of marriage, and in a month afterwards an indurated spot formed on the left labium of the wife. This was followed by secondary symptoms.

In all these cases the disease communicated presented the characters of the specific adhesive inflammation.

The author observed that it had been formally and perseveringly denied that secondary syphilitic disease could be communicated by contact—a theory which had been adopted by a large and influential school, and inflicted much domestic misery, and had been the cause of most painful and unjust accusations. Married ladies, for instance, had not unfrequently found eruptions upon their skins which they were unable to account for. These had been pronounced to be syphilitic by the medical attendants, who, when asked how they could have arisen, had sometimes been bold enough to assert that such diseases could only have resulted from primary chancres, which themselves could only be produced by primary disease. The husbands, misled by such assertions, had been induced to suspect the fidelity of their wives, when they themselves had communicated the disease by means of their own secondary symptoms. The number of cases in which unmarried women had been unjustly accused, and had had a twofold injury inflicted upon them, was very much greater.

The form of secondary syphilitic inoculation, to which the author now directed the attention of the Society, commenced by a chronic form of adhesive inflammation, which terminated in a circumscribed thickening. This might be raised from the surface, in the form of a pimple or tubercle, or it might produce an induration not at all raised above the surrounding parts. The cuticle was generally abraded over the affected surface, but ulceration was no essential part of the disease. The secondary inoculations did frequently ulcerate, but they also often ran their course without any material loss of substance. When the ulceration did occur, it was at the time of the appearance of the constitutional symptoms that it often manifested itself.

A period of incubation, varying from one to six or seven weeks, generally occurred between the contagion and the manifestation of the symptoms. Any idea of destroying the poison by caustic within the first few days was, therefore, quite out of the question. Even if applied immediately that the disease was perceived, it would not check the morbid action. This action might have taken some four or five weeks to develope itself, and could not be counteracted by the destruction of a portion of the tissues which had imbibed the poison. Neither would excision of the indurated part stay the disease; the cut surface would take on the specific morbid action. But the author was led to believe that the cases ultimately did much better in which the indurations were excised, than those in which they were allowed to remain.

Babington (works of Hunter, by Palmer, vol. ii., p. 321) had affirmed long ago that induration might precede ulceration in syphilitic sores. This was formerly denied by Ricord (*Leçons sur le Chancre*, p. 88).

In the form of secondary syphilitic inoculation under consideration, the induration undoubtedly did appear when there was a slight epithelial abrasion only, and might exist for weeks without any action that could be called ulceration. As the

induration might exist without the ulceration, so might the ulceration, or abrasion, exist, for a time at least, without the induration. They might follow each other at an uncertain interval upon the same part; or they might in a few rare cases be separated, and each element of the disease might appear at a different spot.

A discharge from the urethra not unfrequently preceded the form of disease now described. This discharge might easily be mistaken for gonorrhœa. It differed, however, in being more viscid and tenacious in its nature; in not being accompanied by the same amount of irritation, or ardor urinæ; in its short duration, and often abrupt termination.

But neither the character of the induration, the period of incubation, nor the accompanying discharge, would with certainty, in the absence of a correct history, distinguish a secondary from a primary natural syphilitic inoculation. A case was recorded, and the drawing given of a case, in which these corresponded accurately with the foregoing description, and yet the inoculation must have been primary, inasmuch as neither party had had any secondary disease. Several cases were recorded, in which the period of incubation was well-marked, and in which the disease consisted at first of an induration only, without ulceration. These cases were accompanied by specific enlargement of the glands in the groin, and in some of them the peculiar discharge from the urethra preceded the specific adhesive inflammation. In the absence of any distinct history, these cases, in the author's opinion, could not with certainty be classed as instances either of primary or of secondary natural syphilitic inoculation.

## OBSTETRICAL SOCIETY OF LONDON.

Wednesday, February 1st, 1860.

W. Tyler Smith, M.D., Vice-President, in the Chair.

Letters were read from Dr. M'Clintock, Dr. Matthews Duncan, and Dr. Fleetwood Churchill, thanking the Society for their election as Honorary Fellows.

*A Remarkable Case of Midwifery.* By J. Fitzpatrick, M.D., Madras Army. (Communicated by Dr. Murphy.) The patient, aged 32, pregnant for the fifth time, and residing at that period in India, had been treated whilst in Europe a few years before for ulceration of the uterus, which was said to have been cured. She had not been pregnant for seven years. She was taken in labour at the eighth month. There was found to be a breech presentation; the liquor amnii had escaped. Labour made no progress, however, owing apparently to the presence of a membrane, which, when pushed up, formed a *cul-de-sac*. After some deliberation, this membrane, thick and resistent, was incised, and the child delivered. A second child was soon afterwards born, also a breech presentation. There was much hæmorrhage, and the patient was with difficulty brought through. She finally did well.

Some discussion took place as to the nature of the membrane incised.

Dr. Murphy conjectured that an ovarian cyst might have been present, pushing the lower part of the uterus to one side.

Dr. Tyler Smith thought it was a case of agglutination of the os, and that the uterus itself had been cut through.

*Case of Twins: One Blighted.* By W. Sankey, Esq., Dover. A fœtus, apparently about the fourth month, was exhibited, which had come away from the uterus, together with a healthy, ripe, living child. The woman had suffered from slight hæmorrhage at about the fourth month, following a strain.

*Large Fibrous Tumour of the Uterus.* By H. G. Times, Esq. The large fibrous tumour exhibited was eleven inches in length, and weighed ten pounds and a quarter. It was removed from a patient, aged 53, single, who died after a short illness. The tumour had been present to the patient's knowledge for nine months. The catamenia had been regular to the age of forty-eight. The tumour filled the left iliac fossa, was hard, dense, and calcareous in the centre. It was not connected so immediately with the uterus as usual, owing, as the author believed, to the weight of the tumour having by degrees effected a separation. The right ovary was dropsical.

Dr. Priestley was in doubt as to whether the tumour had actually originated in the uterus or not. He was of opinion that a more careful examination would be necessary to decide this important question.

Dr. Priestley and the author were accordingly requested to furnish a more particular account of the specimen.

*Tumour of the Fœtus impeding Labour.* By W. Tyler Smith, M.D. Dr. Tyler Smith exhibited a fœtus, born at nearly the full time, where the labour was impeded by a large tumour attached to the nates of the child, which was still-born. The tumour was partially covered with skin, and was composed of a number of large hydatiform cysts, cutaneous tissue, and pieces of bone and cartilage of irregular shape. At one or two points, processes resembling fingers grew from the external surface of the tumour, and some of the cysts contained cerebriform matter. The tumour appeared to consist of a degenerated ovum, the placenta and the remains of the fœtus being fused together in a perfectly amorphous manner. The attachment of the mass to the healthily formed fœtus was only by cutaneous adhesion, and was readily separated.

*Action of Belladonna on the Secreting Mammary Gland.* By Richard Marley, Esq., Bromyard. The author brought before the Society his experience of the efficacy of inunctions of belladonna in repressing the secretion of milk, after the method first pointed out by Dr. Goolden. He had invariably found the means resorted to efficacious, and the results satisfactory. Forty-four cases were cited, in which, from a variety of causes, it was necessary to apply the remedy. All were successfully treated.

Dr. Tanner's experience would fully bear out the statements of the author. He was constantly in the habit of applying the belladonna inunctions, and was, in consequence, never troubled, as formerly, with inflammation and abscesses of the breast, etc.

ON MIDWIFERY IN THE EAST. BY J. JACKSON, M.D.CANTAB.

This paper was written with the view of bringing to the notice of the Society the existence of midwifery hospitals in India, and the labours of the medical officers attached to these institutions; and it suggested that much interesting and valuable information might be gained respecting the diseases of women and children in the East, and their treatment, if correspondence were entered into by this Society and the respective heads of those establishments.

Dr. Jackson gave a sketch of the state of health in which the young European girl frequently entered upon her life in India, when, after a long sea voyage, she suffered from amenorrhœa, and arrived in a plethoric state, liable at once to an attack of fever, and invariably experiencing the irritating and venomous bites of the mosquitoes. On her restoration to health, and in the event of her soon afterwards marrying and becoming pregnant, the author spoke of the simple manner in which the labour was carried on, and the generally successful issue both to mother and child. He stated, however, that there were diseases peculiar to the country which required careful watching; and amongst these, the most severe one attacking the infant was that of trismus, which came on generally on the morning of the third day, and invariably proved fatal.

Dr. Jackson observed that amongst the older residents, with relaxed fibre and exhausted system, or amongst those that had borne several children, there was at the time of labour great tendency to hæmorrhage from the want of contractile power in the uterus; and that *post partum* hæmorrhage was not unfrequent, requiring the early administration of ergot, etc. In many females, during the period of pregnancy, diarrhœa was an occasional ailment, and even dysentery, from a mild to its most severe form, giving rise to miscarriage and even death. Cases of long continued vomiting and death from pregnancy were not unknown. It was worthy of observation, also, that during the parturient state phthisical patients in India did not obtain that relief to the pulmonic disease which was generally seen in this country: the muscular powers became enfeebled, the heart's action weakened, and there was no cessation of the complaint.

Children were very liable to fever and convulsions during teething; the milk of the native nurse during a catamenial period generally caused great irritability in the child, and, during the hot weather, not unfrequently gave rise to convulsions, which continued more or less, in a milder form, during the whole period of dentition.

A sketch was then given of the mode in which labours were carried on amongst the native females: how at that particular period they were considered impure, and placed in an outhouse; and how there had been for years immemorial an established custom, but not a religious rite, of subjecting the poor woman to the stupefying fumes of charcoal (while she lay upon the floor) and the smoke of wood fires, which filled the apartment, and produced an anæsthetic influence less complete, but less dangerous, than that caused by chloroform or ether.

The greater irritability of the native female was spoken of,

and her liability to tetanus at the catamenial period, which he had never known in the European at that time, though he had seen the disease in a healthy European woman after the birth of the child, on the third day. He stated that the native female was subject to the same diseases as the European.

Some few instances of the malpractice of the native midwife were then given, both in reference to the production of abortion by mechanical means, and as showing the violent measures made use of for the delivery of the child. Dr. Jackson stated that now there had been established by the paternal government of the East India Company a midwifery class in connexion with the several medical colleges, which was very carefully instructed in this particular branch; and as European and even native nurses had an opportunity of being instructed in the management of women at the time of childbirth, and as the higher ranks of natives at the presidencies had begun to appreciate the value of this privilege, and availed themselves of their services, it was to be hoped that instances of malpractice would become less and less frequent, and in time unknown.

Dr. Tyler Smith observed that the common effect of the voyage to India, and other long voyages, was to produce amenorrhœa. The influence of the sea upon menstruation was very marked. It relieved dysmenorrhœa, and especially membranous dysmenorrhœa. It would be important to ascertain if children in this country, suckled by nurses who menstruated during lactation, were more liable than others to convulsions when teething. The fact that the fumes of charcoal had been used to allay the pains of labour in Hindostan for centuries was highly interesting. No doubt they also had an oxytocic effect. It was found that when gravid women died from the inhalation or retention of carbonic acid gas the child was violently expelled. The relaxation of the uterus which led to post-partum hæmorrhage in Europeans in India continued after their return to this country, and some of the worst floodings he had seen occurred in tropical invalids. He usually recommended that women going to India, or other hot climates, should take ergot immediately after the expulsion of the child.

In answer to a question from Dr. Routh,

Dr. Jackson stated that the age at the first menstruation was, according to his experience, twelve to fourteen years as a rule, and the age at the last menstruation forty-five, forty-eight, or fifty.

Dr. Granville believed that fourteen was the earliest year amongst the middle-classes.

## ROYAL SOCIETY.

Thursday, February 2nd, 1860.

Sir Benjamin Brodie, Bart., President, in the Chair.

### ON THE SACCHARINE FUNCTION OF THE LIVER.

BY GEORGE HARLEY, M.D.

The author related a number of experiments which he performed in concert with Professor Sharpey in University College Physiological Laboratory. The results of these experiments did not in any way countenance the notion that sugar is not produced in the healthy animal body; but, on the contrary, such conclusions as they afforded were altogether in favour of the following generally received views upon the subject. The conclusions at which Dr. Harley had arrived were:—

1. Sugar is a normal constituent of the blood of the general circulation.

2. The portal blood of an animal fed on *mixed* diet contains sugar.

3. The portal blood of a *fasting* animal, as well as of an animal fed solely on *flesh*, is devoid of sugar.

4. The livers of healthy dogs contain sugar, whether the diet be animal or vegetable.

5. Under favourable circumstances, and with proper precautions, saccharine matter may be found in the liver of an animal (a dog) after three entire days of rigid fasting.

6. The sugar found in the bodies of animals fed on *mixed* food is partly derived directly from the food, partly formed in the liver.

7. The livers of animals restricted to flesh diet possess the power of forming glucogene; which glucogene is at least in part transformed into sugar in the liver.

8. As sugar is found in the liver at the moment of death (even when the plan of freezing it has been strictly attended to), its presence cannot properly be ascribed to a *post mortem* change; but is to be regarded as the result of a natural condition.

An interesting discussion followed the reading of the paper; in which Sir Benjamin Brodie, Dr. Sharpey, Dr. Carpenter, Mr. Huxley, Dr. O. Rees, Dr. Pavy, and Dr. Harley, took part.

## MEDICAL SOCIETY OF LONDON.

Monday, February 6th, 1860.

John Hilton, Esq., F.R.S., President, in the Chair.

### CLINICAL COMMUNICATIONS.

*Inguinal Hernia: Large Sac containing Blood.* Mr. King related the case of a man aged 77, who, in November last, complained of pain in the stomach, which was attributed to an old hernia. There was found, on examination, to be a direct inguinal hernia; this had been kept up by a badly fitting truss, which had produced an ecchymosed mark on the abdomen. The hernia was reduced; and the patient was simply kept at rest. There were no symptoms of strangulation. In a few days, a tumour was felt in the groin; attempts were made to return it, but without success; it was partly reduced by pressure, but refilled. The swelling increased; and vomiting and constipation set in. The patient was now seen by Mr. Hilton; and, as there were no urgent symptoms, an aperient pill and draught were given. He vomited the draught; and no effect was produced on the bowels, which remained constipated. An exploratory operation was now performed. The sac, or what appeared to be so, being disclosed, the spermatic cord was found lying over it. On opening the supposed sac, instead of intestine, a large quantity of clotted blood was found, of which about a pint was removed. The finger was passed freely up into the sac, but no intestine could be found. A further division of the sac was then made in the direction of the epigastric artery, which was divided and tied. No hernia could be detected. The wound was brought together, poultices were applied, and opiates were given. The bowels were opened, at first by mild aperients, and afterwards spontaneously. On January 7th, 1860, the wound had healed; and, on the 25th, when the patient coughed, there was only an ordinary appearance of hernia at the side of the cicatrix. He was supplied with a truss. Mr. King could not suggest a cause for the blood-tumour. At first, it was thought it might have arisen from the injury produced by a misfitting truss, or from the attempts at reduction; but these causes were obviously insufficient. The symptoms might have been produced by the pressure of the tumour on the abdominal region.

The President said that he had never seen another case exactly resembling that related by Mr. King. When he first saw it, he thought that the hernia might have been reduced *en bloc ou en masse*, and have been pushed back between the abdominal wall and the peritoneum. The cause of the blood-tumour must remain a matter of doubt. The sac extended into the posterior part of the pelvis, behind the bladder.

Mr. Gay mentioned a case in which symptoms of strangulated hernia appeared. The hernia was reduced, the sac being opened. Vomiting set in; and the patient died. After death, a large quantity of blood was found effused into the peritoneal cavity.

*Internal Strangulation with Incarcerated Hernia.* Mr. Bryant related the case of a man aged 34, who was suddenly seized with vomiting and other symptoms of strangulation. He had an old inguinal hernia, which had somewhat enlarged; but there was not much distension or tenderness. When Mr. Bryant saw him, he had severe pain in the abdomen, and constant vomiting. Chloroform having been administered, the taxis was employed with partial success; and the patient expressed himself relieved. In three hours, however, the symptoms returned with increased severity; and the patient had paroxysms of twisting pain in the abdomen. The hernial sac was opened, and a large quantity of omentum was found in it, which was partly returned. Opium was given, and the patient was relieved for a time. Severe pain, however, returned, accompanied by low pulse and clammy skin; no fæces nor urine were passed. The patient died, eighty hours after the first appearance of the symptoms, and sixty-eight hours after the operation. At the *post mortem* examination, the intestines were found black and gangrenous, and a portion of them was constricted by a band passing from the vermiform process of the cæcum to the mesentery. Mr. Bryant observed, that it was to be regretted that an operation had not been performed for dividing the band; but the presence of the hernia had

drawn attention from the real seat of the disorder. He had afterwards learned that the patient had for five years been subject to sudden paroxysms of pain in the abdomen, which were generally relieved by running or walking rapidly. Possibly these attacks arose from some partial strangulation by the band, which was set loose by the exercise.

Mr. CANTON had some years ago seen a case in which an oblique hernia had been reduced, but without relief to the symptoms. The man died; and there was found to be a small membranous band at the internal ring, which had strangulated several feet of the small intestine. The course taken by the band in Mr. Bryant's case he believed to be rare; these bands were generally, at least in his experience, at the internal abdominal ring.

Dr. RICHARDSON had once laid before the Society a case which had occurred in the practice of Mr. Stedman of Sharnbrook, and was operated on by the late Mr. Hurst of Bedford. The strangulation was caused by a small band or ring completely surrounding a part of the small intestine, and having no attachments at any other point.

Mr. GAY had collected the histories of about two hundred cases in which strangulation had been produced by bands. The vermiform process of the cæcum was often the origin of the constricting band; also the lower part of the small intestine; and there was often an attachment to the mesentery. He believed that, in cases of internal strangulation, there would be found to be some previous history of serious abdominal mischief, such as typhus, with inflammation and perforation of the cæcal appendix. And the repeated return of spasmodic pain was important. Still it was often difficult to determine the nature of the case; he had seen a case of intussusception, the symptoms of which closely resembled those produced by internal strangulation.

*Extensive Visceral Disease: Uræmic Poisoning.* Dr. COCKLE exhibited the diseased bladder, kidneys, heart, etc. of a man, who was brought into the Royal Free Hospital a few days ago, heavy, semi-comatose, and rapidly sinking. No information could be obtained about him further than that he was a drover, about 21 years old, and had been ill five weeks. When roused, he passed, at the request of the House-Surgeon, three-quarters of a pint of urine. It was pale, of specific gravity 1.011, yielding only slight indications of albumen when tested by heat and acid. When seen by Dr. Cockle, the man was heavy, semi-comatose, answering, when roused, at random, so that nothing satisfactory could be elicited from him. The face was bloated; the lips were livid. The breathing, slow and laborious when in repose, became greatly embarrassed on any attempt to rouse him or alter his position. His pulse was rather quick and weak. The feet, legs, and thighs, were excessively œdematous, and the abdomen was greatly meteorised. The back of the chest was, generally, very dull upon percussion; the right side, however, more so than the left. A dry, loud wheeze attending inspiration and expiration was alone audible over the entire chest, masking the heart's sounds. Not even an approach to moist *râle* was to be heard at either base. From what examination could be made, nothing with reference to the impulse of the heart was remarked. Some senega and chloric æther were ordered. Death occurred in a few hours. The body was examined within twenty-four hours. The lungs did not collapse; but, with the exception of their anterior borders, they were very generally greatly œdematous, pitting on pressure, and in parts congested, streams of sanguineous serum following every section made. The submucous tissue of the larger divisions of the bronchi was infiltrated. The right pleural sac contained a moderate amount of effusion. The heart was very large, weighing eighteen ounces; the ventricles were both augmented in bulk; the left was greatly dilated and hypertrophied. All the orifices and valves were sound. There was intense congestion of the intestinal tract; indeed, the duodenum tore through towards its termination, upon the gentlest traction. The bladder was considerably distended, as well as the ureters to the pelvis of the kidneys. This appearance led to the inference that some obstruction existed near the neck. Well marked stricture was found in the urethra. The muscular coats of the bladder were greatly thickened, and hernia of the mucous membrane as large as a small hen's egg, existed near the base of the trigone. The ureters were permanently dilated. The kidneys were hypertrophied and lobulated. The right kidney weighed eight ounces and a half; the left kidney nine ounces and a half. Their section gave throughout a bloodless, dense, and somewhat smooth yellowish white surface, and much resembled Bright's kidney. It was difficult to say whether the change in the kidneys were sequential to the affection of the bladder and ureters, or whether two separate affections existed, the one reacting on the other. Dr. Cockle considered that the man's death resulted from uræmic coma, or, in other words, from some alteration of the standard composition of the blood, inducing cerebral phenomena. The slow laborious breathing and meteorised abdomen seemed the indirect result of this paralysing influence upon the nervous system. Indeed, both lung phenomena and *post mortem* results closely resembled those resulting from section of the eighth nerves. The congestion and great œdema of the lungs and submucous tissue of bronchi were the result of the neuro-paralytic hyperæmia, only here determined by poisoned blood depressing the great nervous centre. There were also some other points of interest connected with the physical exploration of the chest. The enlargement of the heart revealed itself by no marked impulse, in consequence of the depressed state of the system. Auscultation only detected a loud, dry wheeze, without any moist *rale* whatever at the bases of the lungs. And, no doubt exists but that subcrepitant *rale* could only be pathognomonic of œdema pulmonium in cases of simple *intra*-vesicular effusion. Where both *intra* and *extra* vesicular effusion exists, the portion of lung affected is as impervious to air as that of the pneumonic lung. But, this difference exists between the two conditions. In pneumonia, the exudation cement, as it were, soon sets, and the lung is thus rendered solid, and in a condition to develope the physical phenomena of bronchial breathing, bronchophony, etc. But in intra and extra vesicular œdema the effusion remains permanently fluid, sufficient in extent effectually to compress, but tending rather to diminish the actual conducting power of the lung, and consequently preventing the development of bronchial breathing, etc. The diffused wheeze was the result of the infiltration of the submucous tissue encroaching upon the actual area of the tubes. The dilated hypertrophy of the limb was most likely the result of the obstruction to the renal circulation.

Dr. ROUTH questioned whether uræmia could be regarded as the cause of death in Dr. Cockle's case. As long as there was any urine passed, coma from the retention of urea could not be produced.

Dr. E. SMITH said that, in urine of specific gravity 1011, there would not be more than two grains of urea in each ounce. Therefore, unless the patient had passed a greatly increased quantity of urine each day, he could not have excreted a proper amount of urea.

Mr. ROGERS-HARRISON, Mr. STREETER, and other members, also made some remarks.

*Fracture of the Pelvis; Head of the Femur driven through the Acetabulum.* Mr. CANTON exhibited a fractured pelvis, taken from a man who had been brought into Charing Cross Hospital, after having been squeezed between an omnibus and a cart. The right leg was shortened about half an inch, and the foot was somewhat everted. Slight crepitation was felt; and it was thought that the case was probably one of impacted fracture of the neck of the thigh-bone within the capsule. In three weeks, the man became delirious and died. On *post mortem* examination, there was found to be extensive fracture of the os innominatum; and the head of the thigh-bone had been driven through the acetabulum, the round ligament being broken off. One of the fractures implicated the ramus of the pubic bone; but the urethra was not injured. The soft parts around the joint were in a sloughy state; the cavity of the joint contained a large quantity of pus, which, however, had been prevented by the thickening of the internal periosteum from passing into the pelvis. The femur itself was not injured.

Mr. ROGERS-HARRISON said that he had once seen a case in St. Bartholomew's Hospital, in which the patient, a strong, muscular man, had suddenly fallen while carrying two sacks of corn for a wager. There was extensive fracture of the innominate bone, with dislocation of the femur on the dorsum ilii. In this case, also, the man lived three weeks.

*New Styptic in Menorrhagia.* Mr. MILLER exhibited a preparation known under the name of Warren's styptic, and related the histories of two cases of menorrhagia in which he had given it. The styptic, as described in the *Med. Times and Gazette* for Oct. 1, 1859, is composed of five drachms of strong sulphuric acid, two drachms of turpentine, and two of alcohol. The dose is forty drops; and Mr. Miller had found it best to mix this with water and then filter, so as to remove an empyreumatic oil which is formed. The first case in which he used it was that of a woman aged 52, who had had menorrhagia for four weeks, and was much reduced thereby. The first dose of the medicine, given on October 15, arrested the flow; and there had

been no return. In the second case, the patient, aged 48, had been much reduced by repeated attacks of menorrhagia since 1855. At the end of 1859, she came under the care of a surgeon who employed the speculum and applied caustics—a proceeding of which Mr. Miller disapproved. Mr. Miller was at last called to her, she having formerly been his patient. The menorrhagia was completely arrested by two doses of the styptic.

Dr. Routh defended the use of the speculum in such cases, on the ground that hæmorrhage was sometimes produced by small polypi, which could not be detected by any other means.

*Cause of Reduplication of the Heart's Sounds.* Dr. Richardson related a case, which he believed to offer an explanation of the cause of the singular phenomenon known as reduplication of the heart's sounds. A man appeared before him complaining of great flatulency, tumultuous action of the heart, and frequent attacks of oppression at the chest. On examination, Dr. Richardson could make out nothing abnormal, except reduplication of, he believed, the second sound of the heart. Instead of the ordinary *lŭb-dŭp* sounds, there were three, making *lŭb-dŭp-dŭp* in the clearest manner. Added to this, there was considerable over-action of the heart; but there was no evidence of any organic lesion of the lung. The man, treated with steel, did not recover, but one morning had so alarming a paroxysm, threatening almost fatal asphyxia, that his friends took him to a hospital, where he was at once placed in a hot bath. The patient described that the instant the effect of the bath was pronounced by the heat and injection of his skin, that instant the embarrassment at his chest passed away; the heart became quiet; and the symptoms, a month afterwards (the time at which Dr. Richardson next saw the patient), had never returned. On now reexamining the heart, the reduplicate sound was entirely gone. After noticing some other cases in which the added sound had disappeared after the employment of a derivative, Dr. Richardson explained that the primary cause of this reduplication was due, in his opinion, not to the heart itself, but to congestion of the lungs. The *normal* diastolic sound was due to the simultaneous tension of the two sets of semilunar valves, pulmonary and aortic. In the cases he had named, he believed that there was preexistent obstruction to the current of blood from the right ventricle, while the course from the left ventricle through the aorta remained free. The two sets of semilunar valves were thus prevented from acting simultaneously: in other words, the retraction of the pulmonary artery, owing to the difficulty experienced in the emptying of its contents into the pulmonic capillaries, was retarded; while the free aorta retracted in right time. In this way, the common sound produced by the two sets of valves was not struck at once; but first the aortic valves, in their tension, struck a diastolic sound; next the pulmonary semilunar valves, in their later tension, struck a diastolic sound; whereupon the sound was necessarily doubled. This explanation of the phenomenon in question opened a view to rational treatment—that treatment being derivative in character; and the hot bath was the best derivative.

# Parliamentary Intelligence.

*HOUSE OF COMMONS.—Thursday, February 2nd*, 1860.

Medical Relief Expenditure in Ireland. Mr. Dawson called the attention of the Chief Secretary for Ireland to the concluding paragraph of the report of the select committee of 1858 on county rates in Ireland, containing the recommendation that the Government should take into consideration the propriety of sanctioning half the medical relief expenditure of the Irish Poor-law Unions to be charged on the Consolidated Fund, in a manner similar to that practised in England and Scotland, instead of throwing the entire burden of the outlay upon the ratepayers. The report stated that the Committee were of opinion that no promise had been held out by the late Sir Robert Peel that the half medical relief in the Irish Poor-law Unions should be secured under the same law as that relating to England and Scotland; nevertheless, inasmuch as the system in regard to Ireland was altered in the month of July, 1852, so as to assimilate the law of Ireland to that of England and Scotland, the committee recommended the house to take into consideration the case of the half-cost of the medical men in those unions, with the view of throwing the burden upon the Consolidated Fund. Now, it never was alleged that any such distinct promise had been made by the late Sir Robert Peel; but it was considered but justice that this expense should be defrayed in the same manner as that of Scotland and England. The number of dispensary districts was 760, at a cost of £45 each, being the half salary of the medical officers. The whole sum amounted to about £32,000 a year. That sum was not large, but it was still important as regarding equal justice to all parts of the United Kingdom, and the payment of which by the Consolidated Fund would give a practical relief to the ratepayers. Since 1846, Ireland, until last year, received no credit for the remission of those local charges which were recommended by the late Sir Robert Peel, in his statement on the subject of the corn-laws.

Mr. Cardwell said, in the course of the year just expired, the Treasury had given full effect to the recommendations of the committee referred to by the honourable gentleman. With regard to the concluding paragraph of the report to which the hon. gentleman called his attention, he would remind him that the recommendation contained therein was only carried in the committee by a majority of 4 to 3, so that it might be said that the committee were tolerably equally divided upon the point.

*Monday, February 6th.*

Coroners' Fees. Mr. Cobbett asked the Home Secretary whether it was the intention of Her Majesty's Ministers to introduce any measure during the present Session to alter the law as regarded the payment of coroners' fees and expenses?

Sir G. C. Lewis said, that considerable uncertainty and inconvenience arose in the present state of the law from the conflicts which occurred between the county magistrates and the coroners with regard to the payment of the fees and expenses of the latter, and from the want of any appeal to a third power. It was therefore his intention to bring in a Bill for the purpose of establishing the power of appeal to the Queen's Bench in disputed cases respecting the payment of coroners' fees. This measure would shortly be introduced.

# Medical News.

## BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

### BIRTHS.

*Of sons, the wives of—*

Beddoes, W. M., M.D., Wistanton, on Feb. 1.
Collins, F., M.D., Staff Assistant-Surgeon, at Winchester, on February 5th.
McClure, W. G., M.D., Clifton Terrace, W., on Feb. 7.
Murray, T., M.D., Bengal Army, at Ajmere, on Dec. 18, 1859.
Noel, D. C., Esq., Surgeon, Upper Tooting, on Jan. 31.

*Of daughters, the wives of—*

Buxton, J. H., Esq., Surgeon, Islington, on Feb. 8.
Monckton, S., M.D., Brenchley, Kent, on Feb. 1.
Schulhof, Maurice, M.D., Brook Street, on Feb. 6.

### MARRIAGES.

Beetson, George, Esq., late Superintending Surgeon Madras Presidency, to Jemima, fourth daughter of James Reid, Esq., Surgeon, of the same presidency, at Westbourne Park, on February 2nd.

Blake, A. G., Esq., solicitor, Croydon, to Sophia G., daughter of *George Robins, Esq., of Charlotte Street, Fitzroy Square, on February 2nd.

Muriel, the Rev. Hugh E., third son of *John Muriel, Esq., Ely, to Laura, eldest daughter of G. S. Keymer, Esq., Islington, on January 24th.

Robinson, Joseph, M.D., Warrenpoint, to Elizabeth, eldest daughter of Thomas Kidd, Esq., Armagh, on Jan. 26.

### DEATHS.

Forster, Thomas, M.D., at Brussels, aged 70, on Feb. 2.
Culhane, William, Esq., Surgeon R.N., on board the *Marlborough*, on his passage to the Cape, on Dec. 10, 1859.
Hunter. On February 4th, at Margate, aged 26, Ann Elizabeth, third daughter of G. Y. Hunter, M.D.

## PASS LISTS.

ROYAL COLLEGE OF SURGEONS. MEMBERS admitted at a meeting of the Court of Examiners, on February 3rd:—

ANDREW, W. W. W., Hethersett
BARTLEET, T. H., Birmingham
BOURNES, Wm. H., Belmullet, Mayo
BRIDGES, John H., Pimlico
DUNN, Fred., Wolverhampton
GIBSON, F. W., Haverstock Hill
HEATH, Robert E., Arklow
KENNARD, David, Lambourne
POWELL, W. L., Macclesfield
PAYNE, Wm. G., March
SMITH, Charles J., Newington
THURSFIELD, WM., Bridgnorth
WEEKES, Wm. H. C., Hurstpierpoint

*Monday, February 6th.*

ANDERSON, M. F., Trinidad
BOURKE, John, Cork
BROMLEY, C. H., Southampton
CHALMERS, John E., Hull
CORNBILL, John, Birmingham
CURTIS, C., Harting, Petersfield
EVERS, Charles, York
FOSTER, F. M., Hull
GAYLEARD, C., Jamaica
HOLT, W., Horbury, Wakefield
HOPKINS, Alford B., Dalston
JONES, Thomas, Brecon
KING, John L., Toronto
KENNEDY, J. B., Stratford
MORGAN, John T., Ceylon
PAYNE, Edwin, Cuckfield
RAYNER, William, Manchester
ROBERTS, Edw. S., Chester
STERN, Moritz, Jamaica
STOKES, W., Camberwell

NEW FELLOWS. The following members of the College having been elected Fellows at previous meetings of the Council, were admitted as such on February 9:—

ARTHUR, John, Commercial Place: diploma of membership dated March 10, 1843
CHAPMAN, Walter, Lower Tooting: May 27, 1840
GARDNER, William Henry, Gloucester Terrace, Hyde Park: August 27, 1839
MANIFOLD, Michael Fenton, Army: July 14, 1843
WREN, Erasmus, Bedford Row: November 3, 1837

APOTHECARIES' HALL. LICENTIATES admitted on *Thursday, February 2nd*, 1860:—

BARR, Joseph H., Stockport
GREENWOOD, Thomas F., Wallingford
ROGERS, J. F., Chesterfield
RUFFE, R. E., Tamworth
STRIDE, Edward, Sheerness

The following gentlemen also, on the same day, passed their first examination:—

BENNETT, Charles, Shiffnal
LEECH, D. J., Manchester
TROTTER, Arthur E. H., King's College

## FEES FOR PROFESSIONAL SERVICES.

WE extract the following article from the *North American Medico-Chirurgical Review* for November 1859:—

The remuneration for medical, surgical, and obstetrical services has, of necessity, varied very much in different ages and countries, according to the estimate of the services rendered, or the relative value of money. In many countries, towns, and cities there are regular fee-bills, regulating the charges for ordinary practice; a custom which we have always regarded as absurd and unjust, since it places, in this particular, all practitioners, whatever may be their respective merits, upon the same level, whereas every man should be permitted to charge according to his skill and the nature of his services, not forgetting the circumstances of his patients.

In looking, not long ago, over some of our papers, our eye chanced to light upon a bill for professional services rendered by the late Dr. James Craik to Captain G. S., of Washington City, the father of a large and highly respectable family, to one of the members of which we are indebted for this interesting document. Dr. Craik was the physician of Washington, and attended him in his last illness, in conjunction with Dr. Dick. The bill is dated 1795, beginning in April of that year, and ending in March, 1799, the entire amount being £66: 16: 6. It covers more than ten pages of foolscap, and particularises every item with the same care as a merchant's or grocer's account. The following extract will serve as a specimen of Dr. Craik's charges:—

| | £ | s. | d. |
|---|---|---|---|
| For extracting Peter's tooth | 0 | 3 | 0 |
| Visit to your lady, and anodyne draught | 0 | 3 | 0 |
| Vial of diaphoretic drops for your son George | 0 | 3 | 0 |
| A purge | 0 | 1 | 3 |
| An emetic | 0 | 1 | 6 |
| For bleeding Capt. S. | 0 | 3 | 0 |
| " delivering your lady | 5 | 0 | 0 |
| Visit to your son George, and vermifuge pill | 0 | 1 | 3 |
| 32 syphilitic pills for Sam | 0 | 16 | 0 |
| Visit to your child Harriet, and 2 alterative powders | 0 | 2 | 0 |
| Visit to your son George, and vermifuge pill | 0 | 1 | 3 |
| 8 ounces of injection for boy Sam | 0 | 5 | 0 |
| One syringe | 0 | 3 | 0 |
| Dressing negro boy's hands | 0 | 2 | 6 |
| Visit to your lady, and anti-rheumatic tincture | 0 | 3 | 0 |
| Visit to your lady, and opening abscess in breast | 0 | 5 | 0 |
| Blistering plaster | 0 | 5 | 0 |
| Bleeding | 0 | 3 | 0 |
| 12 febrifuge powders | 0 | 6 | 0 |
| 6 ounces best olive oil | 0 | 2 | 6 |
| Bleeding negro woman | 0 | 3 | 0 |
| " Master George | 0 | 3 | 0 |
| Dose of salts | 0 | 1 | 6 |
| Inoculating your child | 1 | 0 | 0 |

Emetics, purgatives, absorbent powders, anodyne draughts, and preparations of bark—powder and infusion—are prominent items of the account.

The custom of presenting items in medical bills has, we presume, become obsolete. It is certainly inconsistent with the dignity of a professional man of the present day to descend to such minutiæ. A round statement in dollars should be quite sufficient. Only once, in our whole life, have we been requested so to demean ourselves. We replied, that it was contrary to the habits of professional gentlemen to specify their charges with the minute exactness of an auctioneer's catalogue, at the same time that we informed our *patron* our ledger was at his service; nay, furthermore, that if in future he wanted our attendance on such conditions, he could not have it. The *creature*, now one of the merchant princes of the city where we then resided, had all his life been dealing in sugar, molasses, and whisky, and could therefore not help following the force of his habits.

Professional services are generally much more highly appreciated in cities and large towns than in the country. In the United States, practitioners are much better rewarded in the South and South-west than in the North and East; in the slave States universally much more liberally than in the free. The reasons for these practices are obvious. In towns and cities physicians could not live if their charges were not higher than they are in the country; and in the Southern regions of the United States money is much more plenty than among the same number of inhabitants in the North and East.

The highest fees for medical services in America are paid at New Orleans, where the ordinary charge for a visit is from two to five dollars, while consultation services yield at the rate of from ten to twenty. At Charlestown the first consultation fee, established by long habit, is fourteen dollars, the subsequent ones being each two dollars. In this city the first consultation visit is usually five dollars, and those made afterwards two dollars each. The fees of surgeons are generally, everywhere, higher than those of physicians.

Since our attention has been directed to this subject, we have examined a number of works in our library with a view of ascertaining the charges, ordinary and extraordinary, of practitioners, dead and living, in different countries and in different ages.

In ancient times some remarkable fees were obtained for professional services. It is related of Charmis, who kept a bathing establishment at Rome, in the reign of the Emperor Claudius, that his regular charge for advice to those who were anxious to avail themselves of his treatment was £800. He was the first water-cure doctor, if we may credit the researches of Dr. Doran, that ever practised, and he made an immense fortune, such as no brother of the craft of the present day can at all approach.

The most liberal fee of modern times was that received by Dr. Dimsdale, a physician of Hertford, England, for inoculating the Empress Catherine, at whose request he visited Russia, in 1768. The operation was perfectly successful, and such was the gratification of the Empress that she made Dimdale a baron of the empire, besides presenting him £12,000, and a pension of £500 a year.

The largest fee ever received by Sir Astley Cooper was 1000 guineas. His patient was a man of the name of Hyatt, a retired West India merchant, who was affected with stone in the bladder. The manner in which the fee was presented is worthy of notice. When Hyatt had entirely recovered from the effects of the operation, he requested his surgeon, with his two medical attendants, Dr. Lettsom and Dr. Nelson, to visit him on a particular day. Cooper arrived after the physicians had left the room; he met them down stairs, discussing the liberality of their patient, who had presented each with £300. Sir Astley was cordially received by the old West Indian,

and after having chatted a little while, he rose to take his leave, and had got as far as the door, when Hyatt threw his night-cap at him, saying at the same time, "There, young man, put that into your pocket." Upon examining it, he found a check in it for 1000 guineas. Hyatt, it would seem, was equally liberal to his apothecary, or regular family attendant. One day, being sent for in haste to visit his patient, he fell down and hurt his knee, so as to cause him, on entering, to be lame. Hyatt, observing his condition, immediately exclaimed, "Dobson, old fellow, what is the matter?" On learning what the trouble was, he pulled out a £100 banknote, and applied it to the joint, adding that it was the best plaster in the world for a bruised knee. A wealthy London merchant, Mr. William Cole, paid Sir Astley Cooper annually, for years, £600, for attendance upon his family. During the hey-day of his professional life Sir Astley Cooper frequently made 100,000 dollars a year by his practice. Much of this vast sum was received for chamber practice. He had to answer many letters of advice for which he never received less than a one-pound note, while many yielded him five times that amount.

Dr. Lettsom, who was a West Indian by birth, made, in a visit which he paid to Tortola, his native town, soon after having completed his studies in London, nearly £2000 in five months. After he had succeeded in establishing himself in the British metropolis, his income annually ranged from 20,000 to 25,000 dollars. In 1800, he received, in fees, £12,000, or sixty thousand dollars.

Fothergill, the Quaker doctor, did an immense practice. For the last twenty-five years of his life, his fees annually averaged nearly £7000, or about 35,000 dollars. He commenced his practice in 1740.

Mead's income was, on an average, from £5000 to £7000, for many years. He once received 300 guineas for visiting a patient. The patient had been very ill, but recovered before the arrival of his great physician.

Dupuytren's income was enormous; he began life as a poor boy, and died worth more than a million of dollars. Graefe, the celebrated surgeon of Berlin, left an immense fortune, the result of his professional labours.

In America, physicians are not noted for their high charges or great income. One of the largest fees ever received by any one was that of Dr. Ephraim McDowell for the operation of ovariotomy, performed upon a lady in Tennessee, whose husband gave him fifteen hundred dollars. We have heard of a fee of five thousand dollars being paid to a New York surgeon for an operation for club-foot, but we are unable to vouch for the authenticity of the story. Physick left a large fortune, but rather in consequence of the rise of his estate than of his large professional emoluments. His charges were generally small. A gentleman once handed him a hundred dollar note for attendance on his wife; but the doctor thinking that it was out of all proportion to the value of his services, returned all but ten dollars.

The salaries of court physicians and surgeons have also varied according to the times in which they flourished, and the respective ranks which they occupied. In the reign of Henry III, of France, the pay of the royal household staff was as follows:—

*First Surgeon*, Ambroise Paré, 666 *livres* and 12 *sols*.

*Surgeons in Ordinary*, Pierre Pegray and Antoine Portail, each 333 *livres* and 6 *sols*.

*Assistant-Surgeons*, serving three months in the year, two and two: Jacques Guillemeau, Isaac Bruns, Jehan Lambert, Jacques D'Amboise, Ismael Lambert, Hiérome de la Noue, Charles Buchalier, and Michael Vandelon, each 100 *livres*.

Louis XIV seems to have had a high appreciation of the services of his professional attendants. Being affected with anal fistula, an operation became necessary, on recovering from which he exhibited his gratitude by bestowing upon them not less than £14,700, in the following ratio:

| | | | |
|---|---|---|---|
| To M. Felix | 50,000 crownes | = | £6000 |
| „ Dr. Duquin | 100,000 livres | = | 4000 |
| „ Dr. Fagon | 24,000 „ | = | 1000 |
| „ M. Bessiere | 40,000 „ | = | 1500 |
| „ Four apothecaries, each | 3000 „ | = | 2000 |
| „ M. Raye, apprentice to M. Felix | 400 pistoles | = | 200 |

Considering the enormous price paid for the operation, it is surprising that the filthy disease which it was designed to relieve should ever have become the fashionable court complaint. A surgeon at the present day may regard himself as extremely fortunate if he can occasionally get a patient who is able to pay him two hundred dollars for the division of the sphincter muscles, including the after-treatment.

Scanzoni, professor of midwifery in the University of Würzburg, received 25,000 dollars for attending, a short time ago, the Empress of Russia in her confinement. The prestige with which the favorable reception of this physician at the Russian court invested him, has rendered him the most celebrated accoucheur of continental Europe, and laid the foundation of one of the most aristocratic practices in the world, crowds of the German and foreign nobility flocking to him from all parts.

Medical men sometimes receive, in addition to their regular fees, large presents, either in money, plate, clothing, or wine. Thus, Ambroise Paré, the father of French surgery, at the siege of Metz, in 1552, had a tun of wine sent to him for curing one of the officers of a broken limb, by De La Roch, with a promise that "when it was dronken he would send mee another." The Sultan recently, after his recovery from an attack of ague, in which he was obliged to take an unusual quantity of quinine, the effects of which occasioned symptoms which somewhat alarmed the court, presented his physician, Dr. Caratheodory, precious stones, works of art, and various other articles, valued at between £12,000 and £16,000, besides a handsome estate.

Physicians, on retiring from practice, are sometimes presented with a service of plate by their grateful patrons; and similar compliments are occasionally paid by towns, and cities, in consideration of the services rendered by practitioners during the prevalence of devastating epidemics.

Sometimes, again, the present is in the form of a wife. Thus, Podalirius, whose praises have been sung by Homer, was rewarded by the King of Caria with the hand of his daughter, whose life he was supposed to have saved by bleeding her in both arms, after a fall from the top of a house. Such a gift might not always be agreeable or convenient to the recipient, but it could hardly be otherwise when it comes in the form of a rich princess, as in the case of Podalirius.

Governments do not always reward their subjects in proportion to the value of their services. Jenner, for his immortal labours in vaccination, by which millions of lives have been preserved, received from the British Parliament the paltry sum of £20,000. Brossard, a French surgeon, in the seventeenth century, was richly rewarded by the French government for the disclosure that agaric would arrest hæmorrhage after surgical operations. The remedy was tried, and, of course, found useless, though not until a number of lives had been lost by it. Mrs. Stephens, as late as the last century, obtained a large sum from the British Parliament for making known the supposed virtues of Castile soap and egg-shells in dissolving urinary calculi.

The charges for attendance at coroner's inquests are not commensurate with the services exacted upon these occasions. From ten to twenty dollars is the usual fee for making a dissection for the benefit of the public, and even that sum is often grudgingly allowed. In cases of poisoning the remuneration is, of course, more liberal, though seldom adequate. The largest compensation for services of this description ever paid in this, or, perhaps, in any other country, was that recently awarded by the city of New York to Dr. Doremus, Professor of Chemistry in the New York Medical College. The sum alluded to was 3000 dollars, besides 800 dollars for the outlay of new apparatus. The case was that of Stephens, tried for the murder of his wife by poison. Dr. Doremus was obliged to analyze two entire bodies.

Finally, a good fee is a powerful stimulant, causing the most delightful sensations, and goading a man on to the most vigorous performance of his duties. It increases the pace of the sluggard, and improves the digestion of the dyspeptic. There is not a man in the profession that has not, at times, felt the force of the practice of the celebrated physician of Bath. Finding himself no better for his own prescriptions, he laughingly observed to a friend, "Come, I think I will give myself a fee; I am sure I shall do better then." Putting his hand into his pocket, he took out a guinea, and gravely passing it to the other, he soon got well. Assuredly, reader, there is great potency in a good fee.

Physicians sometimes place no better estimate upon their services than their patients. A young professional acquaintance recently told us that, not long ago, after having prescribed for a female, she handed him a one dollar counterfeit note, which he did not hesitate to take, although he knew at the time it was worthless, believing that it was a fair equivalent for his services. We have not examined our brother's organ of conscientiousness, but suppose it to be very large.

## CONDUCT OF POOR-LAW OFFICIALS TOWARDS MEDICAL MEN.

On Wednesday last, Mr. Brown, medical officer to the out ward of the parish of Chelsea, at Kensal New Town, was summoned before the Chelsea Board of Guardians to answer a charge of disobeying the order of the Board, and of giving a medical certificate that a pauper named Murphy was *not* in a fit condition to be removed to the workhouse, while he was so in reality.

The relieving officer making the charge, one William Tubbs, said, on January 7, a woman called on him with a certificate that her husband, Dennis Murphy, was ill, and required immediate attention. He afforded relief, and upon inquiry he was informed, on good authority, that Murphy did not need parochial assistance, and, by direction of the Board, the relief was stopped. On the 20th, Mrs. Murphy again called at the workhouse with a certificate from Mr. Brown, stating that the man was suffering from an abscess in the arm, and could not be removed to the workhouse, as ordered by the Board. On the back of the certificate appeared the following memorandum:—

"SIR,—I must beg to call your attention to the case of this poor man. I ordered for him, last Thursday week, meat of Mr. Jordan, and wine of Mr. Pergeten, which I will thank you to pay for. It is absolutely necessary for his recovery that he should have very generous diet; and I request, therefore, you let him have one pound of meat, and half a pint of port wine, daily. I warn you, that if you neglect my poor in the way you have been in the habit of doing, I shall report you to the Board.—GEORGE BROWN, M.R.C.S."

The chairman said, that when Tubbs received the note he came to him (the chairman) for advice; and he and others thought it best to instruct another medical man to visit Murphy, and give his opinion upon the case. Dr. Barnes, who was sent, gave a certificate that Murphy was in a fit state to be removed into their house. The chairman then dwelt upon Mr. Brown's having set the Board's order at defiance about meat and wine being allowed sick paupers without first recommending it to the relieving officer. Mr. Brown said that Tubbs had not seen Murphy before he made his report to the Board, and therefore could not honestly report the case as undeserving. Tubbs called on Murphy eight days after the medical certificate had been given; and it was then to say that the relief would be discontinued, as the accident occurred in a drunken row. It was not a portion of a relieving officer's business to inquire how people met with accidents. On the 19th of January he performed an operation on Murphy, and gave the certificate read. On the following day his patient told him that another medical man had been to visit him during the day; and at night Murphy received an order for his removal to the workhouse. Mr. Brown warmly denounced these proceedings, as extremely wrong, as it was impossible that a medical man totally unacquainted with Murphy's case, could give a fair opinion. He did not consider that any respectable medical man would have acted as Dr. Barnes had in the matter. Mr. Walker (the chairman) observed, that the medical gentleman whom the Board sent was not aware that Murphy had been medically attended. Mr. Brown now brought against Tubbs a charge of having systematically acted in opposition to his instructions and wishes, and of having afforded relief to a man who was actually dead. Some disgusting revelations were made in connexion with the latter charge. Mr. Brown said that, if the guardians did not choose to pay for what he ordered for the poor patients, he would defray the charges out of his own pocket. No resolution was arrived at respecting the charge against him.

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HEALTH OF LONDON—FEBRUARY 4TH, 1860.

[*From the Registrar-General's Report.*]

| | Births. | Deaths. |
|---|---|---|
| During week ..... { Boys'..1003 / Girls.. 940 } | 1943 | 1389 |
| Average of corresponding weeks 1849-58 ..... | 1693 | 1326 |

Among the causes of death were—bronchitis, 217; pneumonia, 136; phthisis, 142; small-pox, 44; scarlatina, 39; measles, 22; diphtheria, 4; hooping-cough, 48. The deaths from pulmonary diseases (exclusive of phthisis) were 398, being 96 above the corrected average.

*Barometer:*

Highest (Fri.) 30·156; lowest (Mon.) 28·907; mean 29·655.

*Thermometer:*

In sun—highest (Tues.) 70·0 degrees; lowest (Wed.) 40·0 degrees.
In shade—highest (Mon.) 45·7 degrees; lowest (Wed.) 25·5 degrees.
Mean—36·3 degrees; difference from mean of 43 yrs.—1·1 degree.
Range—during week, 22·2 degrees; mean daily, 10.7 degrees.

Mean humidity of air (*saturation*=100), 85.

Mean direction of wind, N.—Rain in inches, 0·31.



## TO CORRESPONDENTS.

### POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

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*Communications have been received from*:—DR. E. H. VINEN; MR. JOHN HIGGINBOTTOM; MR. JAMES WEAVER; MR. R. S. STEDMAN; MR. HENRY TERRY, JUN.; MR. W. W. THOMAS; DR. FORBES WINSLOW; MR. BLOXHAM; DR. B. W. RICHARDSON; DR. MARKHAM; DR. G. D. GIBB; DR. T. SKINNER; DR. HARLEY; DR. COWDELL; MR. R. S. FOWLER; MESSRS. PRICE & CO.; DR. GRAILY HEWITT; MR. ROPER; MR. R. H. CLARKE; DR. HYDE SALTER; DR. BEALE; MR. F. WHITWELL; and MR. C. WILLIAMS.

### BOOKS RECEIVED.

[* *An Asterisk is prefixed to the Names of Members of the Association.*]

1. Clinical Lectures on Certain Acute Diseases. By Robert Bentley Todd, M.D., F.R.S. London: John Churchill. 1860.
2. Selected Monographs: Kussmaul and Tenner on Epileptiform Convulsions from Hæmorrhage.—Wagner on the Resection of Bones and Joints.—Graefe's Three Memoirs on Iridectomy in Iritis, Choroiditis, and Glaucoma.—The New Sydenham Society. London: 1859.
3. Foundation for a New Theory and Practice of Medicine. By *Thomas Inman, M.D.Lond. London: Churchill. Liverpool: A. Holden. 1860.
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